LIBRARY OF CONGRESS
SURPLUS - 2
DUPLICATE

THE

MEDICAL AND SURGICAL

REPORTER:

A WEEKLY JOURNAL.

EDITED BY

S. W. BUTLER, M.D., AND R. J. LEVIS, M.D.

L. C. BUTLER, M.D., ASSISTANT EDITOR.

October, 1861, to April, 1862.

VOL. VII.

PHILADELPHIA:
LIPPINCOTT & CO., PRINTERS, 144 AND 146 NORTH FIFTH STREET.
1862.

R 11
.M5
new Ser.

INDEX TO VOL. VII.

Abdominal walls, rupture of, 53.
Abuse of child labor, 15.
Albuminuria, case of, 34; with intermittent fever, 109; new remedy for, 301.
Albany County (N. Y.) Medical Society, proceedings of, 176.
Ambulances for Pennsylvania reserve corps, 17; want of, at Drainesville, 309; objections to two wheeled, 453.
American Medical Association, summary of transactions of 1860, 158, 178, 207; meeting of, 522; editorial article on, 619.
Ammonia, hydrochlorate of, 396.
Amputation, an important suggestion, 18; when and how to amputate, 517.
Anasarca, 156.
Anæsthetics, 342, 440, 443, 454.
Anæmia, blood disease, etc., 388, 435.
Anaplasty by heterogeneous transplantation, 228.
Anatomy, hindrances to study of, 596.
Anchylosis of knee-joint, 155.
Aneurism of popliteal space, 59.
Animals, lower order of, instincts, 500.
Animalcules, productions of, 575.
Antrum of Highmore and its diseases, 56, 169.
Anus, artificial, 394.
Apoplexy of the eye, 155,
Apoplexy, death from, clot in ventricle, 388.
Aphthous cachexia, 553.
Arctic explorations, 136, 185.
Army, suggestions for, 16; hospitals in Washington, 138; in Philadelphia, 622; health of, on the Potomac, 209, 353, 600; rations per month, amount of, 191.
Arsenic in uterine hemorrhage, 13; in phthisis, 290; smoking in asthma, 164.
Arsenic and quinia alternately in fever, 238.
Ascites complicating pregnancy, 13.
Asthma, arsenic smoking in, 164; treated with oxygen, 228.
Asylum, New York State Inebriate, 184; Philadelphia Blind, 184.
Axilla, tumor in, 248.

Belladonna in diphtheria, 19, 111, 256, 292, 450; in hooping-cough and incontinence of urine, 486; poisoning by, 487.
Bell, Surgeon L. V., death of, 525.
Berkshire (Mass.) Medical Society, 10.
Bladder, rupture of, surgical operation in, 153; chronic inflammation of, 390.
Blind, Institute for, 308; and Dumb, in France, 132.
Blue cohosh, properties of, 392.
Brain, abscess of, without symptoms, 488; severe injury of, recovery, 226.
Bradford County (Pa.) Medical Society, proceedings of, 63.
Bronchitis—tuberculosis, 175.
Brooklyn Medico-Chirurgical Society, proceedings of, 35, 60, 109, 127, 249.
Brown's bronchial troches, formula for, 308.
Brigade surgeons, duties of, 94.
British Museum, natural history collection of, 301.
Bright's disease, 473; persulphate of iron in, 485, 521.
Butler Hospital for Insane, Providence, R. I., 503.

Cachexia, general, 225; aphthous, 553.
Canada troops, health of, 624.
Cancer returning after amputation, 109; of lung, 474.
Cancer of tongue, ligature of, 487.
Capsular ligament, insertion of, and relation to intra-capsular fracture, 244, 270, 381, 416, 508, 529, 577, 613.
Cataract, operations for, in Lyons, France, 209; treatment of, by evacuation of aqueous humor, 488.
Catarrh epidemic in camp, 189.
Caustic issues in diseases of the brain, 483.
Central Ohio Lunatic Asylum, 526.
Cervix uteri, removal of, 14; ulceration of, in pregnancy, 132.
Child labor, abuse of, 15.
Chloroform in cholera, 12; symptoms of approaching death from, 87; loss of confidence in, 352; how produces death, 438; in slaughter houses, 91.
Chlorate of potash in phthisis, 614.
Cholera, chloroform in, 12.
Chorea sancti viti, 205, 276, 322.
Chromidrosis, 215.
Cimcifuga racemosa, its properties, 338.
City pumps, perilous character of, 211.
Clinical instruction, history of, 210; in San Francisco, 623.
Clermont County (Ohio) Medical Society, 437.
Colitis, chronic, 82.
Compensatory art, 469, 517.
Common *vs.* correct names, 408.
Convulsions, puerperal, discussion of, 250, 285.
Confederate troops, health of, 308.
Constipation, treatment of, 390.
Copaiba, distilled water of, 9.
Correspondence, Domestic:—
Belladonna in diptheria, 19; from New York, 20,

45, 70, 92, 116, 140, 165, 189, 213, 237, 261, 303, 354, 493, 573, 599; Pharmacopœia Nærlandica, 21; Meeting of Pennsylvania Board of Medical Examiners, 45; prolonged retention of fœtus, 117; from Lancaster, Ohio, 117, 450; from Boston, 139, 165, 188, 212, 236, 261; perchloride of iron as an escharotic, 141; from Orange, N. J., 214; from Albany, N. Y., 305; from Nova Scotia, 355; Sanitary Commission, 406; from Circleville, Ohio, 450; from East Fairfield, Ohio, 451; from Detroit, Mich., 493; from Rochester, N. Y., 495; from Lower Merion, Pa., 527; from Kankakee City, Ill., 621.

Correspondence, Army:—
From Rockville, Md., 22; Fort Albany, Va., 46; Seminary, Va., 141; Fortress Monroe, Va., 141, 496, 622; Camp Hamilton, Va., 189; Zurich, Switzerland, 214; Camp Pierpoint, Va., 306; Sanitary Commission, etc., 355; Revaccination in the army, 356; from the 69th and 71st P. V., 71st New York, and 37th Indiana, 406; Rolla, Mo., 451; Camp Griffin, Va., 452; Camp Michigan, Va., 453; Fort Warren, Boston, 497; General Hooker's Division, 522; Camp Magaw, Md., 573.

Couches for hospitals, 448.

Cranium, fracture of, 283; of base of, 442.

Delirium tremens, digitalis in, 341; iced bath in, 598.

Dentition, convulsions from, 83.

Deformities of the feet, with illustrations, 313.

Depression of skull, epilepsy, trephining, 466.

Diabetes, new remedy for, 301; new treatment of, 228.

Diarrhœa, chronic, 58, 474; fatty, attending diabetes, 488.

Diet, drinks, air, etc., for sick, 544.

Diphtheria, belladonna in, 19, 111, 256, 292, 450; new syringe for, 178; conclusions upon and treatment, 255; nature and treatment of, 450; free incision of tonsils in, 355, 550; laryngotomy in, recovery, 514; thirty-three years ago, 546; do. and diphtheritic paralysis, 222.

Dislocations, method of reducing, by manipulation, 4; of elbow-joint, 75.

Dysentery, with chronic peritonitis, 225, 226; arsenic in, 263; neutral salts in, 343; treatment of, 435.

Dropsy, clinical cases of, 436; general, 475.

Drowning, recovery from, 254.

Eaton, Ohio, Medical Society, 438.

Editorial Articles:—
Commencement of seventh volume, 15; abuse of child labor, 15; Reporter and legitimate medicine, 42; what is proof of live birth? 43; the medical college introductories, 67; Inauguration of Bellevue Hospital Medical Colllege, 88; "Scopes," 90; treatment of fractures of long bones by extension, 113; a new era in medical education, 133; prospective failure of cinchona—its substitutes, 134; woman's sphere and usefulness, 162; way marks of progress, 181; "died of neglect," 182; history of clinical instruction, 210; fees and fee bills, 231; the death of Sir John Forbes, 257; a medical annuity fund, 258; the Sanitary Commission, cui bono? 297, 400; sanitary arrangements in New York, 349; proposed reforms in the medical department of the army, 351; loss of confidence in chloroform, 352; military drill—physical culture, 446; theories in medicine, 489; Senators Wilson and Hale, and the medical department of the army, 490; American Medical Association, 522, 619; the foundlings in Philadelphia Almshouse, 523; the surgeon on the battle-field, 548; have we too many doctors? 567; Commencement of Jefferson Medical College, 569; hindrances to the study of anatomy, 596; medical provision for railroads, 618.

Editorial Notes and Comments:—
Suggestions for the army, 16; ambulances for Pennsylvania reserve corps, 17; medical heroism, 17; woman's hospital, 69; prolapse of funis, 91; measles by mail, 91; chloroform in slaughter-houses, 91; early discharge of the ovum after menstruation, 91; treatment of prisoners by the Confederates, 92; obstetrical anæsthetics, 115; important paper and discussion, 115; an explanation, 115; substitute for tinctures, 115; scarlatina by mail, 135; sanitary report, 136; Arctic Expedition, 136; Medical Colleges of New York, 137; important, 137; adulterations of mustard, 138; vaccine matter for the army, 138; army hospitals, 138; subterranean stoves for warming tents, 163; Dr. Sims in Paris, 164, 260; in Europe, 183; arsenic smoking in asthma, 164; government hospitals in Philadelphia, 164, 184; the wounded at the Belmont battle, 184; New York State Inebriate Asylum, 184; Philadelphia Blind Asylum, 184; Dr. Hayes' Arctic Expedition, 185; the new Sydenham Society, 185; Pirogoff's operation, 185; Vermont Asylum for the Insane, 185; Brooklyn, N. Y., Medico-Chirurgical Society reunion, 186; treatment of prisoners at Moyamensing, 211; death of St. Hilaire, 211; Dr. Letheby on city pumps, 211; illness of Prof. Von Graef, 234; Philadelphia Hospital, 234; widows and orphans of medical men, 235; Sanitary Commission and the Medical Bureau, 235; government hospitals for the insane, 235; announcement, 259; podophyllin as a substitute for mercury, 260; an Indian remedy for variola, 260; hospitals at St. Louis, Mo., 299; podophyllin in secondary syphilis and gonorrhœa, 300; natural history collection of the British Museum, 301; use of opium and quinia, 301; new remedy for albuminuria, diabetes, and various forms of heart disease, 301; quacks as surgeons in the American army, 302; incompatibles, 303; visiting lists, 303; amenities of war, 303; sanitary condition of Vermont troops, 353; health of the army, 353; Indigent Widows and Single Women's Society, 354; heating city cars, 354; death of Prince Albert, 354, 525; quinia as a prophylactic in the army, 402; Maine Insane Hospital, 403; salting railway tracks, 403; sanitary legislation at Albany, N. Y., 404; Newark, N. J., Dispensary, 405; hospitals at Alexandria, 405; professional pleasantries, 405; couches for the hospitals, 448; military hospitals at Augusta, Me., 448; completed, 448; Board of Health in New York, 448; report of surgeon-general of Pa., 449; Medical Society of New York, 449; the ether question,

491; pelvic hematocele, 492; hospital for contagious diseases, 492; illness of Prince Albert, 492; Surgeon-General Finlay, 492; insane department of Philadelphia Alms-house, 524; library of Philadelphia Hospital, 524; death of Dr. L. V. Bell, 525; suit for malpractice, 525; carelessness and its results, 526; medical clubs, 526; Central (Ohio) Lunatic Asylum, 526; Pennsylvania College of Dental Surgery, 549; Jefferson Medical College, 549; Pennsylvania Hospital for the Insane, 550; free incision of tonsils in diphtheria, 550; filthy water, 550; remedy for nursing sore mouth, 551; bebeerina in menorrhagia, 551; medical provision for railroads, 551; Kensington water-works, 571; death of Ex-Governor Pennington of New Jersey, 571; correction, 571; New York University, 571; University of Buffalo, 571; Vermont University Medical College, 572; hospital arrangements of the Fifth Vermont Regiment, 572; University of Pennsylvania, 597; Philadelphia College of Pharmacy, 598; iced-bath in delirium tremens, 598; large doses of quinia in typhoid fever, 599; etherization in epileptic convulsions, 599; vindication of Surgeon J. B. Porter, 620; tax on patent medicines, 620; wounds at Fort Donelson, 620; Bellevue Hospital Medical College, 621.

Ecchymosis of eyelids, etc., 131.

Encephalo melanosis, Dr. Bauer's case, 249.

Erysipelas, 11; its treatment, 41; muriate tincture of iron in, 443.

Electric telegraph, physiological effects of, 575.

Epilepsy, case of, 82.

Episcopal Hospital, 575.

Ether question, 491.

Exostosis, numerous, on extremities, 206.

Fashionable follies, dangerous, 624.

Fever, intermittent, with albuminuria, 109; do. chronic, 175; do. and pleurisy, 247.

Fever, typhoid, 176, 282; typhus, 522; arsenic and quinia alternately in, 238.

Femur, treatment of fractures of, by weights and pulley, 220.

Fistula, vesico-vaginal, case and operation for, 81.

Foundlings in Philadelphia Alms-house, 523.

Fœtus, prolonged retention of, 117.

Fungi, rapid growth of, 167.

France, population of, classified, 624.

Fractures near elbow-joint, treatment of, 74.

Fractures, ununited, cure of, after long standing, 84, 285.

Fractures of patella, silver suture for, 180; intracapsular, 437.

Fractures of base of cranium, 442; of femur, treatment of, by weights and pulley, 220.

French in Crimean war; sickness and mortality of, 167.

Glanders and small-pox, 113; acute, in a pregnant woman, 347.

Gleet, local treatment of, 85.

Gonorrhœal rheumatism, 107.

Graef, Prof. Von, illness of, 234.

Gustatory nerve, division of, for cancer of tongue, 487.

Gymnast, training of, 501.

Hair-dye, formula for, 576.

Hair, sudden changes of color in, 107.

Hare-lip, new method of operation for, 583.

Have we too many doctors? 567.

Hæmoptysis, 81.

Health, Board of, in New York, 448; in Philadelphia, 499.

Heart, acupuncture of, 396; experiments on action of, 544.

Hemorrhoids, treatment of, 131.

Hernia, umbilical, treatment of, 156: a new operation in, 613.

Hernia, ventral, mistaken for pregnancy, 391.

Hemiplegia and phthisis, 209; do. and paralysis, 203.

Hints and observations on military hygiene, etc., 25, 99, 145, 193, 430.

Hindrances to study of anatomy, 596.

Hip-joint, exsection of, 198; amputation at, 476.

Hippophagy, 449.

Hospital Practice, Illustrations of:—

Albuminuria, 34; phosphatic deposits in the urine, 34; pleurisy, 58; chronic diarrhœa, 58; onychia maligna, 58; chronic abscess of left nates, 59; tumor of forehead, 59; aneurism of popliteal space, 59; scirrhus of mammary gland, 60; hydrocele, 60; hæmoptysis, 81; epilepsy, phthisis, colitis, 82; pneumonia, convulsions from dentition, necrosis, 83; syphilitic ulceration of soft palate, syphilitic nodes, 84; gonorrhœal rheumatism, 107; cancer of pancreas, 107; do. of œsophagus, 108; chronic rheumatism, 108; intermittent fever, with albuminuria, 109; apoplexy of the eye, 155; anchylosis of knee-joint, 155; congenital umbilical hernia, 156; rupia syphilitica, 156; anasarca, 156; bronchitis—tuberculosis, 175; chronic intermittent fever, 175; typhoid fever, 176; hemiplegia, paralysis, 203; strumous ophthalmia, 204; varicose ulcer, 204; chorea sancti viti, 205; icterus, 205; congestion of lungs, 206; exostosis, 206; peculiarly furred condition of the tongue, 206; dysentery, with chronic peritonitis, 225; general cachexia, 225; obstinate vomiting, 247; intermittent fever, pleurisy, 247; tumor in axilla, 248; nævus materni, 248; mercurialization—deformity, 248; secondary syphilis, 248; typhoid fever — relapse, 282; emphysema of lungs, 283; fracture of the cranium, 283; wry neck, 284; talipes varus, a new operation, 284; articular rheumatism, 284; ununited fracture, 285; anæmia—blood disease—enlargement of the spleen, 388, 435; apoplexy—death—clot in the ventricle, 288; jaundice—enlargement of the liver, 389; foreign body in knee-joint, 389; chronic inflammation of the bladder, 390; dysentery, diarrhœa, 435; several cases of dropsy, 436; general dropsy—Bright's disease, 436, 473, 475, 521; intra-capsular fracture of the femur, 437; rupia, 474; cancer of lung, tumor in mediastinum, 474; pneumo-thorax, 475, 520; confirmed opium eating, 475; amputation at hip-joint, 476; rheumatism, 520; do. subacute, 521; pneumonia, 521; do. acute—disease of heart, 521; typhus fever, 522; mania-a-potu, 541; acute tuberculosis, 542; neuralgia, arsenic in, 542; acute rheumatism, 543; pulmonary fistula, 543; a new operation in hernia, 613; rachitis congenital, 613.

Hospital arrangements in Fifth Vermont Regiment, 572.
Hospital at St. Louis, Mo., 299, 454; Howard Hospital, 352; at Brooklyn, 454; for contagious diseases, 492; at Rainford's Island, Boston, 503; Episcopal, 575; burned, 142; at Fortress Monroe, 263; Long Island College, 575; in Great Britain, 575; government, in Philadelphia, 239.
Homœopathy, stringent resolutions against, in Ireland, 23.
Hydrocele, 50.
Hydrophobia, 103, 172, 621.
Hydropathy, 191.
Hydrargyrum cum creta, an unsafe remedy, 441.
Hydrangia arborescens in urinary diseases, 143.
Hypophosphites, formula for, 191.
Hygiene, military, 25, 99, 145, 193, 430.

Icterus, 205, 389.
Illustrations:—
Resection instruments, *four* illustrations, 27; removal of foreign bodies from œsophagus and trachea, *one* do, 35; knock-knee, *two* do., 37; periostitis of femur, *two* do., 62; lachrymal apparatus, *one* do., 74; fractures and dislocations of elbow, *seven* do., 74, 75; bullet forceps, *one* do., 145; orthopædic surgery, *thirty-one* do., 268, 314, 316, 318, 411, 457, 459, 460, 461, 462, 463, 505, 602, 603; intra-capsular fractures, *seventeen*, do., 273, 274, 275, 381; compensatory art, *four* do., 471, 472; dental operations, *nine* do., 559, 560, 561, 562; rachitis, congenital, *three* do., 614. In all *eighty-two*.
Indian hemp; its properties and uses, 340.
Infants in France, mortality among, 181.
Innocents, massacre of, in London, 552.
Insane hospitals, Vermont, 185; Rainford's Island, 503; government do., 235; Central Ohio, 526; Maine, 403.
Incompatibles, 33.
Iowa troops, health of, 142.

Jaundice, 205.
Jefferson Medical College, clinics, 58, 59, 60, 155, 156, 204, 248, 388.
Jefferson Medical College, closing lectures of, 549.
Jefferson Medical College, commencement of, 569.

Kerosolene as an anæsthetic, 342, 440.
Kensington water-works, 571.
Kidney, cystic degeneration of, 61; encephaloid, disease of, removal, 126; rupture of, 132.
Knee-joint, false cartilage in, operation for, 275; foreign body in, 389.
Knock-knee, case of, cure, 37.
Kousso for tapeworm, 173.

Lachrymal obstructions, new method of treatment in, 73.
Larynx, foreign body in, removal, 347.
Lectures, 241, 265, 313, 409, 457, 505, 529.
Lingual artery, ligature of, for cancer of tongue, 487.
Liver, obstruction of, causing ascites, new remedies for, 38.
Liver, enlargement of, in Bright's disease, 473.
Live birth, what is proof of, 43.
London hospitals, clinics, 206.
Long bones, comparative increase of, 132.
Lungs, emphysema of, 283.

Malpractice, suit for, 167, 525.
Malaria, theories in relation to, 359.
Mammary gland, scirrhus of, 60.
Maine Insane Hospital, 403.
Mania-a-potu, treatment of, 541; by iced bath, 598.
Measles by mail, 91.
Medical Societies:—
Berkshire, Mass., 10; Brooklyn Medico-Chirurgical, 35, 60; Bradford County, Pa., 63; Vermont, 157; Albany County, N. Y., 176; Philadelphia County, Pa., 25, 250, 285, 565, 591, 610; army at Cairo, Ill., 357; Clermont County, Ohio, 337; Eaton, Ohio, 438; New York, 449; New York State, 476; New Jersey, 479.
Medical charity fund, 18; do. clubs in army, 526; do. Benevolent Association, Mass., 143; do. students at different schools, 164; do. misfortunes in America, —; do. cadets, appointment of, 309; do. officers for, Canada, 454; do. appointments, naval, 503.
Medical heroism, 17.
Medical provision for railroads, 551, 618.
Medical men, widows and orphans of, 235.
Medical Department of the Army, reforms in, 351; Wilson's bill, 455; Wilson and Hale on, 491.
Medical Board, Naval, 47; in Gen. Dix's division, 309; of Pennsylvania, 45; of Vermont, 47.
Medical College Commencements:—
Jefferson, 569; New York University, 571; University, Buffalo, 571; Vermont University, 571; University of Pennsylvania, 597; Philadelphia College of Pharmacy, 598; Bellevue Hospital Medical College, 621; Massachusetts Medical College, 623; New York, 137; Dental College of Pennsylvania, 549.
Medico-Chirurgical Society, (Brooklyn, N. Y.,) reunion, 186.
Medicine, theories in, 489.
Menstruation, its condition in phthisis, 30.
Menorrhagia, bebeerina in, 551.
Mercurialization—deformity, 248.
Mercury, elimination of, from the system, 88; podophyllin as a substitute for, 260; use of, in primary syphilis, 396.
Miasmata, its nature and results, 6.
Midwifery, meddlesome, 451.
Microscope, the, its value as a means of diagnosis in pulmonary tuberculosis, 217.
Military hygiene, diet, dress, exercise, etc., 25, 99, 145, 193, 430.
Military Hospital:—
At Richmond, Va., 71: at Augusta, Maine, 448; at Mound City, Illinois, 502; at Hilton Head, 36, 502; Summit House, 575; in Philadelphia, 239.
Military drill, physical culture, 446.
Milk sickness, its cause, 443.
Monsell's salt, preparation of, 408.
Morbus coxarius, mercurial treatment of, 39, 483.
Morphia, solution of, for subcutaneous injection, 311.
Moyamensing Prison, treatment of prisoners, 211.
Mustard, adulterations of, 138.
Mutes, number of, in France, 13.

Nævus materni, 248.
Narcotics, notes on, 105.
Nausea in pregnancy, new remedy for, 39.
Necrosis of bones of humerus, etc., 83.

Neuralgia, arsenic in, 542.
Newark (N. J.) Dispensary, 404.
New remedies, a new work on, 358.
New York State Medical Society, 476.
New Jersey State Medical Society, 479.
News and miscellany, 22, 47, 71, 93, 118, 166, 190, 215, 263, 308, 356, 407, 453, 528, 551, 574, 623.
Nursing sore mouth, remedy for, 551.
Nux vomica an antidote to aconite poisoning, 391.

Obturators, use and formation of, 420, 559.
Obstetric forceps, discovery of Chamberlin's original, 311.
Œsophagus, cancer of, 108; method of removing pins from, 546.
Oiled paper, a substitute for oil-silk, in surgical dressings, 551.
Oil wells of Pennsylvania, 600.
Onychia maligna, 58.
Ophthalmia, strumous, 204; purulent in armies, 339.
Ophthalmological curiosities, 174.
Opium, its frequency in prescriptions, 301; as an aphrodisiac, 342; eating, 475; in diseases of children, 481.
Orthopædic surgery, lectures on, 241, 265, 313, 409, 457, 505, 529, 613.
Os uteri, unrelaxing, remedy for, 86; maldirection of, in labor, how corrected, 257.
Otitis interna, three cases, and treatment, 463.
Ovum, early discharge of, after menstruation, 91.
Oxygen in treatment of asthma, 228.
Ozena, chronic, treatment of, 483.

Palatine defects and their treatment, 328, 376, 420, 559.
Pancreas, cancer of, 107; scirrhosity of, diagnosis in, 201.
Paralysis—hemiplegia, 203; do. diphtheritic, 222.
Parietal bone, fracture of, trephining, 202.
Parotid gland, removal of, 40.
Patent medicines, tax on, 620.
Patella, fractured, treatment of, 13.
Pennsylvania College of Dental Surgery, 549.
Pennsylvania Hospital for the Insane, 550.
Pennsylvania Hospital, clinics, 34, 58, 107, 108, 109, 156, 175, 176, 203, 247, 282, 613.
Pepsin in indigestion, 347.
Periscope, 11, 38, 65, 84, 129, 158, 178, 226, 254, 290, 338, 390, 438, 480, 544, 614.
Periostitis of left femur, 61.
Phthisis, menstruation in, 30; clinical case, 82; pathology and treatment of, 290; physical signs of, their practical value, 333; general symptoms and physical signs of certain diseases attending, 423; acute, 542.
Pharyngitis, and stomatitis, 86.
Philadelphia Hospital clinics, 176, 205, 225, 388, 435, 473, 520, 541; library of, 524.
Philadelphia County Medical Society, 250, 285, 565, 591.
Philadelphia Alms-house, foundlings in, 523; insane department of, 524.
Physical culture—military drill, 446.
Pirogoff's operation, 185; condition of stump after, 394; improvement in operation suggested, 622.
Pickles, adulteration of, 302.
Pleurisy, 58; and intermittent fever, 247.
Placenta prævia, nine cases of, 151.
Pleasantries, professional, 405.
Pneumonia, chronic, 83; pleuro, 83; clinical case, 521.
Pneumothorax, 475, 520.
Podophyllin as a substitute for mercury, 260; in syphilis and gonorrhœa, 300, 495.
Poisons for noxious animals, method of preparing, 155.
Poisoning by aconite, 361.
Polysarcia, death from, 263.
Pomegranate root a remedy in tapeworm, 472.
Potassæ chloras, in phthisis, 614.
Pregnancy, ascites complicating, 13; nausea and vomiting in, a new remedy for, 39; extra uterine, 34.
Prolapsus ani, new treatment of, 564.
Prince Albert, death of, 354, 525.
Puerperal convulsions, discussion, 250, 285; ether in, 343.
Pulmonary tuberculosis, 290, 333, 423, 542.
Pulmonary fistula, 543.
Purpura hemorrhagica, treatment of, 395.
Pus cells in atmosphere, 131.

Quacks, a hundred years ago, 23; as surgeons in the army, 302.
Quinia, as a prophylactic, 129, 402, 480, 526; frequency in prescriptions, 301; large doses of, in typhoid fever, 599.

Rachitis—congenital, 613.
Rattlesnake bites, their treatment, 442.
Reviews and Book Notices:—
Agnew—Baron Larrey, 296.
Barwell—Treatise on Diseases of the Joints, 66.
Beck—Lectures on Materia Medica, 186.
Bedford—Principles and Practice of Obstetrics, 399.
Bedford—Clinical Lectures on Diseases of Women and Children, 595.
Brown—Health; five lay sermons, 546.
Bumstead—Pathology and Treatment of Venereal Diseases, 229; second notice, 296.
——Value of Vaccination in Armies, 445.
Francis—Thesis on Hospital Hygiene, 446.
Gross—A System of Surgery; pathological, diagnostic, therapeutic, and operative, 567.
Guthrie—Commentaries on Surgery of War in Portugal, Spain, France, etc., 595.
Holmes—Border Lines of Knowledge, 547.
Jenkins—Jenkins's Vest-Pocket Lexicon, 295.
Leared—On Sounds caused by Circulation of Blood, 230.
Longmore—Treatise on Gunshot Wounds, 547.
Macleod—Notes on the Surgery of the War in Crimea, 294.
Maxson—On the Practice of Medicine, 398.
Morland—Morbid Effects of Retention in the Blood, of Elements of Urinary Secretion, 67.
Mott—Eulogy on the late J. W. Francis, 295.
Read—Placenta Prævia, 348.
Sargent—Bandaging and other Operations of Minor Surgery, 596.
West—Lectures on Diseases of Women, 187.
Revaccination in army, 356.
Rheumatism, gonorrhœal, 107; chronic, 108; articular, 284; iodide of potash in, 520, 521; alkaline treatment in, 543.
Rhino-plastic operation, a new one, 293.

Rupture of bladder, operation in, 153.
Rupia syphilitica, treatment of, 156, 474.

Salting railway tracks, 403, 574.
Sanitary Commission, 297, 400; and Medical Bureau, 235; and Wilson's bill, 355.
Sanitary arrangements in New York, 349; report, 136.
Sanitary condition of Vermont troops, 353.
Sanitary legislation at Albany, New York, 404.
Scarlatina, by mail, 135; is it contagious? 237.
Scarlatinal dropsy, a new remedy for, 166.
Scurvy among the troops, 24.
Sea sickness, remedy for, 113.
Secondary syphilis, 248.
Small-pox and glanders, 113.
Spermatorrhœa, treatment of, 343.
Sponge tents, 528.
Stomach, induration, hypertrophy, etc., of pyloric extremity, 201.
Stomatitis and pharyngitis, 86.
Strabismus, 65.
Stertor, cause and treatment of, 397.
St. Vitus's dance, 276, 322.
Submaxillary gland, removal of, 40.
Suicide in France, 576.
Suppurating joints, treatment of, 546.
Superficial palmar arch, ligature of, 346.
Surgeons, appointment of, in Pennsylvania, 118; veterinary in the army, 308; on the battle-field, 548; in the Confederate navy, 552.
Surgeon-General, of Pennsylvania, report of, 449; of Massachusetts, report of, 623.
Surgical principles, new, 40.
Surgical instruments, how to prevent, from rusting, 263; do. dressings, oiled paper for, 551.
Suspended animation, method of restoring in, 263.
Sydenham Society, 185.
Syphilis treated with podophyllin, 495; sarsaparilla in, 546.

Tænia solium, expulsion of, by copper, 14; kousso in, 173; cause and cure of, 396; pomegranate root in, 472.
Talipes varus, a new operation for, 284.
Tapeworm, 173, 396, 472.
Tarso metatarsal ostitis, resection, amputation, 127.
Teeth, influence of heat and cold on, 393.
Tenotomy and myotomy, 415.
Tent floors, warming and drying, etc., 119, 163.
Tight lacing, 302.
Toe nail, ingrowing, treatment of, 13, 344.
Tongue, furred, in disease of bladder, 206.
Tracheotome, 357.
Troops, confederate, health of, 308; do. in Canada, 624.
Tuberculosis, pulmonary, 290, 333, 423, 542.
Tubercle, pathology of, 345.
Tumor, albus, 62.
Tumors, fibrous, intra-uterine, 35.
Turpentine in typhoid fever, 337.
Typhoid fever, turpentine in, 337; large doses of quinia in, 599.

Ulcer, varicose, 204.
Umbilical hemorrhage, death from, 119; do. cord, prolapsus of, 87.
University of Pennsylvania clinics, 81, 83.
Urinary calculus, dilatation of urethra for removal of, 85.
Urine, phosphatic deposit in, 34.
Uterus, inversion of, 11.
Uterine hemorrhage, arsenic in, 13; do. tumors, fibrous, 35.

Vaccination in Pennsylvania troops, statictics, 309; compulsory do. in New York, 528.
Vaccine matter for the army, 120, 138.
Vaginismus, 394.
Variola, an Indian remedy for, 260; cases and treatment, 516; modification and treatment, 565, 591, 610.
Varus, 37; talipes, 284.
Veal, slink, 120.
Vesico-vaginal fistula, operation for, 81.
Vermont Medical Society, 157.
Vermont troops, health of, 307.
Visiting lists, 303.
Vital statistics, 24, 48, 72, 96, 120, 144, 168, 192, 216, 264, 312, 360, 408; of Brussels, 454, 456, 504, 528.
Vomiting in pregnancy, new remedy for, 39; infantile, 87; obstinate, 247.

War, amenities of, 303; a new weapon in, 310.
Water; its history, characteristics, etc., etc., 2, 49, 78, 97, 121.
Water beds in surgical practice, 249.
Where and how to amputate, 517.
Woman's sphere and usefulness, 162.
Women's Hospital, 69.
Wounded at Belmont battle, 184; in engagement with the Merrimac, 600; sufferings of, at Fort Donelson, 576.
Wounds, gunshot, of the lungs, 249; do. at Fort Donelson, 620.
Wills Hospital, 407.
Wry neck, 284.

Zinc, oxide of, in delirium tremens, etc., 293.

ORIGINAL CONTRIBUTORS TO VOL. VII.

Agnew, D. Hayes. Vesico-vaginal fistula, 80; clinic, 83.
Arink, Gerard. Pharmacopœia Nærlandica, 21.
Allen, J. M. Correspondence; revaccination in the army, 356.
Atlee, W. S. Discussion, puerperal convulsions, 288.
Ayers, Daniel. Clinic, 35; tarso-metatarsal ostitis, 127.

Bauer, Louis. Clinic, 35; double genu varum, 37; periostitis of left femur, 61; tumor albus, 62; returning cancerous disease after amputation, 109; lectures on orthopædic surgery, 241, 265, 313, 409, 457, 505, 529, 601; water-beds in surgical practice, 249; encephalo melanosis, 249.
Bell, John. Discussion, variola; its modifications and treatment, 564.
Bontecou, R. B. Army correspondence, 496, 622.
Burns. Discussion, variola, etc., 612.

Calhoun, J. T. Army correspondence, 573.
Campbell, A. C. Aphthous cachexia, 553.
Coates, B. H. Discussion, variola, etc., 566.
Condie, D. F. Discussion, puerperal convulsions, 285; variola, etc., 591.
Cooper, John. Clinical remarks, 35.

Darrach, W. Discussion, puerperal convulsions, 287.
Da Costa. Clinical lectures, 388, 435, 473, 520, 540.
Dutcher, A. P. Menstruation; its condition in pulmonary tuberculosis, 30; the microscope in do., 217; physical signs of do.; their practical value as a means of diagnosis, 333; certain chest diseases attending do., 423.

Fleming, W. M. Syphilis successfully treated with podophyllin, 495.
Francis, Samuel W. Water; its history, characteristics, etc., 2, 49, 78, 97, 121.

Garretson, J. E. Antrum of Highmore, and its diseases, 56, 169; palatine defects, and their treatment, 328, 376, 420, 558; operations upon the lips and cheeks, 583.
Gaynor, Lewis. Arsenic and quinia in fever, 238.
Gerhard. Clinical lectures, 156, 175, 203, 247, 282.
Gibbs, O. C. Miasmata, 6; weekly summary of medical journalism, 11, 38, 65, 84, 129, 158, 178, 226, 254, 290, 338, 390, 438, 480, 544, 614; notice of Maxson's practice, 398; of London Lancet, 399.
Gourmet. New York correspondence, 20, 45, 70, 92, 116, 140, 165, 189, 213, 236, 261, 303, 354, 493, 573, 599.
Gross, S. D. Clinical lectures, 58, 155, 204, 248, 283, 389, 437, 476.
Griscom, J. H. Book notices, 546.

House, John G. Is scarlatina contagious? 237.
Holmes, D. Meeting of Board of Medical Examiners of Pa., 45; report of Bedford County Medical Society, 63.
Horton, H. L. Is kousso a specific for tapeworm? 173.
Homberger, Julius. Ophthalmological curiosities, 174.

Jewell, Wilson. Discussion, variola, etc., 594.
Jones, N. E. Belladonna in diphtheria, 450.

Kay, C. Meddlesome midwifery, etc., 451.
King, N. S. Prolonged retention of fœtus, 117.
King, James. Army correspondence, 306.

Levick, J. J. A historical sketch of the dance of St. Vitus, with notices of some kindred diseases, 276, 322.
Ludlow, J. L. Clinical lectures, 176, 205, 225.
Lyon, L. M. Operation for false cartilage in the knee-joint, by free incision, 275.
Lynch, Edward. Remarkable case of convulsions, 117; diphtheria; its nature and treatment, 450.
Lodge, J. W. Camp malaria, 22; diphtheria, laryngotomy, recovery, 514; correspondence, 527.

Maul, D. W. Epidemic catarrh in camp, 189.
Meigs, J. F. Clinical lectures, 34, 58, 107.
Morton, T. G. Remarks upon lachrymal obstruction; with a new method of treatment, 73.
Mayburry, W. Discussion, puerperal convulsions, 289.
McIntosh, Alexander. Free incision in tonsils in diphtheria, 355.
Mack, J. M. Correspondence, 621.
Moody, G. A. Remedy for nursing sore mouth, 551.

Nebinger, Andrew. Discussion, puerperal convulsions, 250; variola, etc., 610.
Norris, Geo. P. Variola; cases and treatment, 516.

Osborne, J. D. Army correspondence, 141.

Paist, H. C. An anomalous affection, 103.
Palmer, B. Frank. Compensatory art, 469; where and how to amputate, 517.
Pancoast, J. Clinical lectures, 284, 613.
Parrish, Edward. Notes on the narcotics, 105.
Parker, S. J. Free incision of tonsils in diphtheria, 550.
Pepper, Wm. Clinical lectures, 81.

Read, Wm. Nine cases of placenta prævia, 151.
Remington. Discussion, variola, etc., 613.
Rohrer, John S. Scirrhosity of pancreas, with induration, hypertrophy, and ulceration of duodenum and pyloric extremity of stomach, 201.

Smith, Geo. K. The insertion of the capsular ligament of the hip-joint, and its relation to intra-capsular fractures of the neck of the femur, 244, 270, 381, 416, 508, 536, 577, 605.
Sayre, Lewis A. Returning cancerous disease after amputation, 109.
Somers, J. B. Hydrophobia, 172.
Shiland, A. Perchloride of iron as an escharotic, 141.
Stoddard, C. L. Encephaloid disease of the kidney, removal, 126.
Swinburne, John. New method of treatment of fractures and dislocations near the elbow-joint, 74; excision of hip-joint, 198; treatment of fractures of femur by weights and pulley, 220; poisoning by aconite, 361.

Thomas, R. P. Crampton's method of reducing dislocations of the humerus by manipulation, 4.
Thompson, J. W. Belladonna in diphtheria, 19.
Tilton, H. R. Bark of pomegranate root as a remedy in tape-worm, 472.
Trimount. Boston correspondence, 139, 165, 188, 212, 237, 261.
Turnbull, Laurence. Hints and observations on military hygiene, etc., 25, 99, 145, 193, 430; three cases of otitis interna successfully treated, 463.

U. S. A. Correspondence, Sanitary Commission, Wilson's bill, 355.

Wales, E. L. B. Oil of turpentine in typhoid fever, 337.
Walter, A. G. Spontaneous rupture of abdominal walls, with remarks on the recuperative powers of nature, 53; rupture of bladder, treated by abdominal section, 153; case of depression of the skull, with epilepsy, temporarily relieved by trephining, 466.
Wickes, Stephen. Correspondence, 214.
Willard, S. D. Report of Medical Society of Albany County, 176; correspondence, 305.
Wilson, E. Discussion, puerperal convulsions, 289.
Williamson, J. Diphtheria and diphtheritic paralysis, 222.
Willets, ——. Cystic degeneration of kidney, 61.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 259. PHILADELPHIA, OCTOBER 5, 1861. NEW SERIES, VOL. VII. NO. 1.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Water: its History, Characteristics, Hygienic, and Therapeutic Uses.

By Samuel W. Francis, A.M., M.D.,
Of New York.

(*Continued from page* 529.)

IN BOTANY.

The grandeur and sublimity of a mountain range, with its vast proportions and lofty outlines, may only find responses, of an equal depth, in the breasts of those who have advanced in years and thought; but the tiny cowslip and the modest daisy, by their delicate expressions of most innocent existence, are sure to fascinate the youthful spirit and entrance the man of feeling. Time lingers over roses and regrets their early demise; but the moral lesson taught by nature, and the forcible example of the flower and its fruits, or speckled seed, possesses a latent power worthy of the purest followers, and indicative of attributes, exacting in their character.

The vehicle for sap, in trees or plants, which carries strength to furthest branches and brings succor to the feeble vine, obedient to the laws of capillary attraction, can burst bonds that seek to force it back, and rises to its loftiest limit by the aid of water, as an useful and required ally. Taking but a general view of the lofty monarchs of the gloomy woods, or glancing at the architecture of the smallest bud, one is constrained to see in water, be it dew or rain, the overflowing of the Nile, or the damp exhalations of a moistened soil, the great vital spark that urges on the sensitive plant to unfold its beauties, and encourages the youthful pine to gain strength, imbibe more sustenance, breathe in the mysterious chlorophyll, and develope till the time arrives for its declared utility.

M. de Flotow, following the suggestion of Duhamel, with regard to the coloring of the skin of fruits, maintained, after many curious and ingenious experiments, that the rays of the sun, acting directly on the skin of healthy fruit, such as specimens of the Napoléon, Buerré d'Hiver, B.Diel, Merveille de Charneaux, and Poire de Dechant, if moistened by dew, produced the bright red bands* so much prized by epicures, and striven for by horticulturists.

While the mossy turf and bowling-green alleviate the sad monotony of human thoughts, and rests the weary eye of him who seeks for pleasure in the giddy world; and with diurnal certainty a cordial welcome is accorded to the humid strength in winter, when all other mortals seek for shelter in the abodes of luxury, or huts with houseless comforts; nature, by her very chilly agent, snow, protects the blades of grass and lichens from the freezing blast or varying temperature.

There is a diversity of opinions relative to the duration of the life of plants. The interesting statements of the learned Knight relative to the prolonged existence of *bacheloric* fruit trees, and *spinster* shrubs, cause one to believe that, though single-blessedness may be of a protracted character, the happiness of married creatures, being of two-fold a character, though not perhaps spun out as many years, is of a double kind with *bi*beatitudes! We are informed by one of deep erudition and analytic power,† "that the cells of the newer layers of wood are storehouses of nourishment: the sap, when beginning its ascent, is nearly PURE WATER; as it ascends, it becomes more and more loaded with the contents of the cells through which it has travelled, and the buds are thus supplied with nourishment by the living agency of the

* Journal de la Sociète Imperiale of Centrale d'Horticulture.
† Prof. Fleming before the Botanical Society of Edinburgh.

former years, which made the buds, and provided for its development."

According to Mr. Miesler, when the indigo, fera Caroliniana, is obtained by the inhabitants. before proceeding to churn it for use, it is steeped twenty-four hours in water to bring about certain changes. Though the best wheat may be planted, germinate, grow, and form a plant, a most mysterious change, owing to "sudden freezing and thawing while the ground is wet," transforms it into "*chess*," a different species.

This has been contradicted by persons of qualified experience, but Samuel Davidson, of Greece, Monroe county, N. Y., after severe testing and thorough sifting, found such to be the case.

The opinion of many has been that the absence of trees from extensive prairies is the result of man's energetic labor; but more recent study and comparative, topological investigations* have convinced those who have looked into the subject, that rain falls with more generous purpose in the vicinity of large bodies of waters, or when the clouds are influenced by the pointed peaks of elevated mountains. Moreover, a scanty rain will not supply the wants of greedy foliage, or thirsty mammoth roots, and oaks and maples, birch and chestnuts tolerate no dry existence. The time to fell a tree is after copious rain, when the evaporation from the leaves deprives the sap of all else but organic matter transformed into a woody fibre.

M. Dubreuil succeeded in obtaining apples of unusual size by the judicious use of a solution of sulphate of iron—twenty-four grains to a quart of water.

Though chill and fever leave their mark upon each victim that may be subjected to miasma, in most marshy places, and a life-time be not long enough to effectually eradicate the sad mishap; though that panacea for this trouble—Quinine! may alleviate the sufferings and free the patient for a season, from annoyances of vast import, this poison, generated from decaying vegetable matter, may be chained to its locality by man's shrewed judgment, and a world of trouble be thus saved. By planting sunflowers around the marshy soil, at proper times, according to a wise suggestion,† the following the result;

"The ague and fever poison is set free during the process of vegetable decay, which poison is absorbed by the rank-growing sun-flowers, again elaborated into vegetable matter, and so retained until cold weather sets in."

For this misfortune, arising from a watery bed, we have, as compensation, water recommended by astute philosophers and calm reflectors, as a means of cure. Hirschel and the enthusiastic Oertel exclaimed—"Drink water in abundance, the more the better, for water relieves all from everything." Le Dran—1731, Raymond—1755, Marteau—1767, and Hahn—1783–84,* during the brightest periods of their intellectual existences, extolled its praises, and proclaimed its priceless value.

Hippocrates gives utterance to the following sentence: "Water drinkers have generally keen appetites. . . . . Hunger is abated by a glass of wine."† To counterbalance the deleterious character of water as connected with miasma, the remarks of some few may not be amiss to satisfy the curious that, though externally absorbed from chilly regions, it may prove injurious, as a soother for the thirsty man, it is above comparison with other means. "Water is the most wholesome drink. It answers all the intentions of common drinks, for it cools, moistens and quenches thirst."‡ Again, "Cold water is the most proper beverage for man as well as animals—it cools, thins and clears the blood—it keeps the stomach, head, and nerves in order—makes man tranquil, serene, and cheerful."§ "No drink tastes so good, and, in truth, none is so good as water, none possesses adaptation so exact to the vital necessities of the organs."‖ We are informed by one of an intelligent class of meditators that "Those who take it in moderation, enjoy, to a very high degree, all the faculties, as well mental as intellectual, and often attain advanced age."¶ Another, whose mind judged only of what influenced it through peculiar channels of thought, asserts, with brevity and emphasis, that "Water *alone* is the proper drink for *every* animal."** Once more, the evidence of a learned follower†† of Hygeia is worthy of note, "Water, as it is the most ancient, so it is the best, and most common fluid for drink, and ought to be esteemed the most commodious for the preservation of life and health." He who lived among the students of the past and, with most fascinating diction claimed for healthy happiness re-

*See the remarks of D. Vaughn.

† Lieutenant Maury of the National Observatory.

* Unterrich von der Kraft, und Wirkung des Kalten Wassers. † Hipp. Sect. ii., Aphor. 21, p. 1245. ‡ Dr. Mainwaring. § Faust. ‖ Dr. Mussey. ¶ Rostan. ** Arbuthnot. †† Parr.

freshing solitude,* gives it as his opinion, that "water is the most suitable drink for man; and does not chill the ardor of genius."

As we close this practical evidence of the benefit of water, compensating for rheumatic pains caused by undue exposure to its influence upon the body, the expression of one deeply versed in metaphysical results, firstly, with regard to wine, and, secondly, concerning water, may divert, amuse, and instruct: †

"Though I look old, yet I am strong and lusty:
For in my youth I never did apply
Hot and rebellious liquors in my blood;
Nor did not, with unbashful forehead woo
The means of weakness and debility.
Therefore my age is as lusty as winter,
Frosty but kindly."

And, speaking of this purest of all friends, the same strong, steady, sturdy student says:

"Here's that which is too weak to be a sinner—honest water, which ne'er left man i'th' mire."

With regard to the cultivation of the soil, be it arable, well-tilled, or of scanty capabilities, the main object of the farmer, when entering on his duties for the harvest year, is to satisfy himself as to the proper drainage of his fields. Where water forms a reservoir beneath the sod, as necessary is it to free nature from this great excess as is the proper moisture in a sandy field, or too great clay-deposit to be rendered rich by a judicious application of the brain and energetic allies from the rich manure heap.‡

To the Egyptians, the credit is assigned of having *first* made botany a study. This fact is derived from the writings of Pliny,§ who claimed Homer‖ as authority on this subject. Even in the stupendous works ascribed to Mercury Trismegistus, traces of horticultural precepts and medicinal aphorisms, as derived from thoughtful writings relative to the latent virtues of plants, were found. Now and then their plain views of turning aside too great surfaces of irrigating water indicate the tenor of their thoughts, and supply the link between the old custom of by-gone days and modern civilization. Surely, though vast progress has been made, during the last century, with the wisdom of modern lights come also depraved subserviency to the demands of hastened gain. Though uninfluenced by the elevating principles of Christianity, the ancients treated with respect the bodies of deceased relatives, and embalmed the noble frames of long, well-tried, familiar friends, believing, with an innocent simplicity, that, after the calm absence of three thousand years, the soul* returned to its accustomed home. If, however, the loved body was preserved from worms and the sad ravages of foul corruption were withheld from gaining ground, it did not leave its former tenement; and, though, at present, we can talk across a mighty continent, and hold immediate commune with one cherished for the purest worth—though steam can bear us on the wings of wind, and complicated, vast machines turn out almost whatever the heart desires—though the palimpsest is now dispensed with, and the scintillations of the brightest minds are struck off from the mammoth press with lightning speed — though thoughts spring up, with healthy growth, from the innermost recesses of exalted beings, and are wafted from one region to another, ever to be permanently studied and remembered, till time ceases to perform its function — though comparison in arts is not to be employed with past and present—we, superior in all else but reverence for the dead, use these very bodies, that have lain in dignified seclusion for long centuries, as *fuel* to urge on the mighty red-flamed-breathing engine, to annihilate both distance and advancing time. Certainly the following is most appropriate to such iniquity:

"Nil erit ulterius, quod nostris moribus addat
Posteritas: eadem cupient facientque minores,
Omne in præcipiti vitium stetit." †

The grand error of our powerful nation is the want of meditation on past deeds. There exists no paucity of thought for future gain.

Recent investigations have unfolded mighty facts relative to the destruction of the stoutest timber, if exposed to a peculiar dampness, that begets the never-failing Merulius lacrymans, or equally destructive Polyporus hybridus.‡ We are informed by those who have suffered materially from the loss of valuable vessels, that "it is curious that the spawn of this fungus can often

* Zimmerman. † Shakspeare.

‡ "Most wonderful things have been done in the draining way. It was at one time thought impracticable to drain the extensive level between Yorkshire and Lincolnshire, as the great river Idle, navigable of itself, passed, with its destructive land-floods through the vast level on the Yorkshire side of the Isle of Axholm; yet was this river, by the skill of the undertakers, carried through a new cut into the Trent on the other side of the isle: by this happy thought, the draining was greatly facilitated, and a large tract of land recovered from the waters."—*Museum Rusticum et Commerciale: or, Select Papers on Agriculture, Commerce, Arts, and Manufactures, &c.*, London, MDCCLXVI.

§ Plin. 1, 25, sect. 5, p. 360. ‖ Odyss. 1, 4, v. 228.

* Herod. 1 z., n. 123. † Juvenal.

‡ "Outlines of British Fungology, containing characters of above one thousand Species of Fungi, and a Complete list of all that have been described as Natives of the British Isles," by Rev. M. J. Berkeley.

elude and defy the artifices and skill of the most sagacious human being. *It can eat out the heart of ships and the foundation of houses;* it can sap the very floor on which man stands, the very table round which he gathers his family and friends, and the very couch on which he reposes. While he sleeps, it grows; while he rests, it advances; while he is at peace with all the world, it may be at war with him. . . . . England may smile at an invasion of Frenchmen, but she might well tremble at the invasion of funguses!" The remarks of Schweinitz and Badham* afford abundant evidence of the almost unlimited power of smut, hop mould, mildew, rust, ergot, and bunt, as regards destruction and rapidity of generation. On the loftiest mountains one may find their representatives beneath the shady trees, or bordering the hottest springs. Their energy is equally as indefatigable. Besides being so unsparing in its foe-like characteristics, as a grateful ally at the rich repast, it furnishes important and congenial aid to him who lives on dainties and admires what is exquisite in taste. Mushroom sauce of any kind finds strong adherents in most every clime. We read with pleasure and sufficient gusto the receipts† for making ketchup, and appreciate the benefical qualities of the Polyporus tuberaster, or the peculiar Pietra Fungaja of Italy, no doubt endorsed by Cardinals when fasts are over, and imagination once again permitted to form tastes.‡

To the traveler, who observes the customs of inhabitants and dwells minutely on the nature of existence, influenced, as it may be, by locality, especial want of certain kinds of food; or those totally deprived, at first sight, of the very means of living, the vast spreading turf-bogs of Ireland must prove most interesting and instructive. While we wonder at the preservation of both genera and species in the formation of this semi-coal receptacle, and pick out of aged pete the traces of the Pinus sylvestris, Quercus robur, Alnus glutinosa, and Betula alba; also, occasionally the well-formed remains of the Taxus baccata, and large tracts made up of Sphagnums; while we view and classify the phanerogamic, and, with zeal, attempt to separate them from the cryptogamic plants, throughout the course of our studies we see water as the mighty agent that transformed, preserved and protected this accumulation of what was to furnish succor to the laborer worthy of his hire.*

To be Continued.

* Esculent Funguses of England.

† Mrs. Hussey's Illustrations of British Mycology.

‡ Consult Quatrefages.

* Observations on the Plants which, by their growth and decomposition, form the principle part of the Irish turf-bogs. Read before the British Association, by Mr. D. Moore.

Crampton's Method of Reducing Dislocations of the Humerus by Manipulation; Condensed from the Author, with Comments.

By R. P. Thomas, M.D.,
Surgeon to the Episcopal Hospital, Philadelphia.

As the advance of surgical science is gradually substituting new and improved methods of overcoming the difficulties attendant upon luxations by dexterous manipulations, in place of the old mechanical contrivances which have so long been in vogue, we present, for the benefit of our readers, a condensed account of one of the oldest and simplest of the plans yet devised for the relief of dislocations of the humerus, namely: that announced by Mr. (afterwards Sir Philip) Crampton, Surgeon to the Forces in Ireland, in the *Dublin Medical Journal*, Nos. vii. and viii. 1833, with plates, representing the appearances presented, after death, in two cases carefully dissected by him. An abstract of his article is furnished in the New York reprint of the London *Medico-Chirurgical Review*, vol. 19, July, 1833; Baltimore *Medical and Surgical Journal*, vol. 1, p. 492, 1833; and in the London *Medical Gazette*, vol. xii, p. 242, 1833. The post mortem appearances of these cases, on which he based his plan of reduction, may be briefly stated as follows:

Case 1. In 1808 a laboring man, who was struck by a falling wall, and being seriously injured, was carried to the Dublin Infirmary in a dying state. After death, the right humerus was found to be dislocated into the axilla. The capsular ligament was completely torn from the lower part of the neck of the humerus to the extent of more than half its circumference; the head of the bone burst through the lower part of the subscapularis muscle, some of the fibres of which closely embraced the neck of the bone, while the bulk of the muscle was pushed upwards and detached from the inner surface of the scapula. The head of the humerus rested on the neck and part of the venter of the scapula without the intervention of any

muscular substance. The tendon of the long head of the biceps remained in its groove. The short head of the biceps and the coraco-brachialis curved over the neck of the humerus on the sternal side, while the long head of the triceps crossed the neck of the bone obliquely on the dorsal side, thus strangulating, as it were, the head of the bone, by these three muscles. When extension was made, the biceps and triceps seemed to close behind the head of the bone, and to interpose themselves between it and the glenoid cavity. The tendons of the supra-spinatus, infra-spinatus, and teres minor muscles were completely torn from the humerus.

To ascertain the obstacles opposed to reduction, the scapula was fixed, *the arm raised*, and extension applied to the wrist, so long as the hand was held *supine*, the head of the bone remained immovable, apparently from the closing of the biceps and the triceps behind it; but on turning the hand *prone*, rotating the limb *inwards*, and continuing the extension, reduction was easily effected.

Case 2. A man aged thirty, was precipitated fifteen feet into a burning lime-kiln, and, among other injuries, he had a disclocation of the humerus forward under the pectoral muscle, which was reduced by Mr. McNamara in the Meath Hospital "by merely drawing the arm gently forwards and downwards with one hand, while he pushed the head of the bone towards the glenoid cavity with the other." The man died in the course of the day, and eighteen hours after death, Mr. McN. reproduced the dislocation, and dissected the joint.

No muscle was ruptured, and no tendon was separated from its insertion into the bone. The head of the humerus rested on the neck of the scapula, at the root of the coracoid process, but extending nearly as far as the notch in the superior costa. It had passed out through a rent in the capsular ligament *over the upper edge* of the tendon of the subscapularis muscle. The rent in the capsular ligament was on the inner side of the brim of the glenoid cavity, but the ligament was perfect at the inferior part (i. e. the part corresponding with the axilla.) The *supra- and infra-spinatus muscles were on the stretch*, but had suffered no injury. The axis of the head of the bone, in its dislocated position, was scarcely a quarter of an inch higher than the axis of the glenoid cavity, and hence, being nearly opposite the rent in the capsular ligament, we can readily comprehend the facility of its return—the tense supra and infra-spinatus muscles drawing it into place as soon as pressure on the head of the bone was made by Mr. McNamara.

Case 3. Is a dissection made by Sir Astley Cooper, (cited by Mr. Crampton,) of a recent dislocation into the axilla, in which the resistance to reduction, even after death, was such as he could not by himself overcome. He divided one muscle after another, cutting through the coraco-brachialis, teres major and minor, and infra-spinatus muscles, but still the opposition to his efforts remained. He next divided the deltoid muscle, and found that the supra-spinatus muscle was his greatest opponent, *until he drew the arm directly upwards* at a right angle with the body, when the head of the bone glided into the glenoid cavity. Sir Astley suggests that in the living subject "the biceps should be at the same time relaxed by bending the elbow."

Cases 1 and 3 illustrate the pathology of dislocations into the axilla; and case 2 affords a proof, both of the possibility of a primary dislocation directly forward under the pectoral muscle, and of its occurrence without the necessary rupture of any tendon or muscle.

In cases 1 and 3, the manipulations required for the reduction are identical, while the pathological conditions are diverse. Thus in the first the tendon of the supra-spinatus was torn from the bone, and hence could neither aid nor retard reduction. While the true obstacle to its accomplishment was found in the stricture-like embrace of the biceps and coraco-brachialis muscles on the sternal, and of the long head of the triceps on the dorsal side of the neck of the humerus, which interposed themselves between the head of the bone and the glenoid cavity, when extension in the usual manner was made. But when *the arm was raised* to the horizontal position, and *the limb rotated inwards* by turning the hand *prone*, the neck of the humerus was relieved from the grasp of the biceps and triceps, and the head rotated into the glenoid cavity.

In the other case, (3,) Sir Astley found the head of the humerus pressed against the inferior part of the brim of the glenoid cavity, the supra-spinatus being the muscle chiefly, if not exclusively, concerned in causing the pressure. By raising the arm to a right angle, the tension of this muscle was relieved and the head

of the bone mounted over the brim of the glenoid cavity into its socket upon slight rotation.

These disections satisfied Mr. Crampton "that the resistence to the reduction of a recently dislocated shoulder, proceeds altogether from the spasmodic contraction of the irritated muscles about the joint." Acting on this conviction he has furnished two rules for the reduction of dislocations into the axilla, and forward under the pectoral muscle respectively, viz:

1. *To reduce a luxation into the axilla.* "The surgeon applies a gentle extension at the wrist, and slowly raising the arm to nearly a horizontal position, suddenly pulls it upwards, and a little forwards—that is, towards the patient's face—while, at the same time, he suddenly pushes the trunk backwards, by pressing with the left hand, below the axilla, he will, in a great number of *recent cases*, succeed by this simple process in reducing the dislocation." The rationale is evident. By grasping the wrist we secure a long lever, and by raising the arm we relax the stricture of the biceps and triceps muscles on the neck of the bone, or relieve the tension of the supra-spinatus, as the case may be. Then by carrying the arm upwards and a little forwards, i. e. "by turning the hand *prone*, and rotating the limb *inwards*," we obtain a fulcrum on the margin of the glenoid cavity, on which the head mounts and rotates into its socket.

2. *To reduce the dislocation forwards.* "The surgeon should place his left arm, extended horizontally, immediately below the walls of the axilla, between the dislocated arm and the chest, and then grasping the wrist in his right hand, he should draw the arm forcibly across the patient's body."

Bearing in mind the tense condition of the supra and infra-spinatus, the explanation in this case also is apparent. The surgeon's left arm serves as the fulcrum, upon which, when extension is made at the wrist of the patient, the neck of the humerus presses, and the head is forced to rise to the level of the glenoid cavity. The mechanical impediment to the reduction being thus overcome, the supra and infra-spinatus muscles draw the head of the bone into its socket.

Notwithstanding the simplicity of the manipulations proposed by Mr. Crampton, and the high character of their author, they do not appear to have received much attention from the profession either in Europe or America; but as the subject of manual reductions of dislocations of the different joints is now attracting the consideration of medical men, the plans suggested by him are worthy of especial notice from the fact of their having been founded on pathological observation.

Miasmata.

By O. C. Gibbs, M.D..
Of Frewsburg, N.Y.

It would be interesting to enter into a historic resumé of the various theories in regard to the nature of the causative agent or agents that produce the so-called miasmatic diseases. However inviting the field, this is not the proper time or place to enter upon such an inquiry. In the *Lancet and Observer* for September, Dr. Wm. F. Harvey, of Plainfield, (Ind.,) has an article upon *miasmata*, in which some novel views are expressed, and some humble opinions of ours dignified into consequence by an attempt at refutation.

We will try to give Dr. Harvey's views as briefly as possible:—"In regard to yellow fever and the plague, I have long held to the opinion that they were of the same class of diseases with intermittents and other similar malarious diseases, but that they were higher grades. I would begin at intermittents as the lowest in the scale, and then follow on up with remittent, congestive intermittent and remittent, etc. etc., and place yellow fever next to the highest in the scale, and the plague the highest."

He believes *carbon*, or *carbonaceous gases*, to be the primary cause of all this class of malarious diseases, and proceeds to reason thus:—"All vegetables absorb oxygen during the night and give out carbon; and, during the day-time, they absorb carbon and give out oxygen. This is their process of breathing; but the relative proportion of carbon given out is not so great as oxygen, because a portion is appropriated to the growth of the plant. During the summer season, vegetation is in its most vigorous condition, and takes up all the carbon of the atmosphere as fast as it is disengagrd from decaying matter. In the autumn, after vegetation has ceased to grow, and its lungs—the leaves and blades—have commenced drying up, the plants cease to absorb any more carbon from the air; and, as the production of carbonic acid is still going on from decaying matter, the air becomes unduly burdened with it for health. This gas is then inhaled with common air in greater

abundance than during the growing season of vegetables, and the lungs do not receive the same amount of oxygen at each inspiration as when vegetation is taking up the carbon. Hence the blood cannot become so thoroughly depurated of its effete animal carbon as when the proportion of oxygen received at each inspiration was greater. About the time when vegetation comes to maturity, and ceases to grow, malarious diseases begin to prevail, and become more and more prevalent as the fall advanees.

Now, if carbon, in some form, is not the cause of such diseases as arise from miasmata, why do the diseases regularly appear at the season of the year when that substance or gas is most abundant? There is no other known agent that accumulates in the atmosphere in the proportion that carbonic acid does after the growth of vegetation ceases. In all organic bodies, the proportion of carbon is much greater than any other competent element."

To us it seems as though our author's theory and argument stood open to several fatal objections. Let us answer his last question and comment with another question: If the approach of the *autumnal equinox is not* the cause of miasmatic fevers, *then why* do nine in every ten cases occur within twenty days before or after this period? If the *aroma of ripening corn is not* the cause of intermittent or remittent fevers, *then why* do nineteen-twentieths of such diseases occur *when corn is ripening?* If *new potatoes* are not the cause of such diseases, why do they *nearly all occur* at such time when this vegetable is brought into requisition in the fall? Now these questions are quite as much to the purpose as the one Dr. Harvey asks, and, as arguments, they *will not quite answer in medical inquiry.*

Unfortunately for Dr. Harvey's argument, vegetation ceases to absorb carbon the most completely after severe frosts in the fall, and *then*, according to his theory, miasmatic fevers *should be* most abundant; but this is the very time when they *cease altogether*, that is, so far as new attacks are concerned. For his theory, they *commence too early and cease too soon.* Three or four years ago, we had, in this section, a severe frost in June, in all this region, that killed the foliage on all the forest trees, shrubs, etc. Extreme warm weather followed, under which circumstances our systems were not in condition to work up much carbon, and, for a month at least, vegetation was not in a condition to absorb it from the atmosphere. Under such circumstances, according to the theory of Harvey, we should have had the so-called miasmatic fevers in abundance—*not a single case occurred within the range of our observation!* We might instance another objection to Dr. Harvey's theory:—Miasmatic fevers should be most abundant in the isolated hamlets in the forests, where vegetable growth is greatest. Not so; where extensive clearings and fallowing are made, *there* will miasmatic fevers most abound, all the other predisposing conditions being equally present.

We wish to make another quotation, showing by what arguments Dr. Harvey supports his opinions, as well as by what sophistry errors in medicine are probably propagated. "At one of the meetings of the *Hendricks County Medical Society*, Dr. Hutchinson stated to me that, in one locality where he once practiced, the ague made its appearance on the west side of a stream of water, annually, for a number of years, while the inhabitants of the *opposite, or east side* of the stream escaped. The country on the *west side* was *low and flat*, while on the *east side were high hills.* During *one season* the ague and fever broke out on the hills, and was *very severe*, while on the west, low grounds, THE INHABITANTS WERE FREE FROM SUCH MALADIES. The Doctor asked me to explain the cause of this on the supposition that carbon in some form produced the diseases. I asked him if the hills were not made up, in a great measure, of limestone, and if they were not heavily timbered? He replied that they were. My explanation of the occurrence of the fevers on the high lands was, that it was owing to the decomposition of the limestone, and the want of appropriation of the liberation of carbonic acid by the vegetation. Now, I would ask, by what other hypothesis the fact could be explained?" Unanswerable as Dr. Harvey regards these facts and explanation in support of his theory, to us they seem quite worthless—*proving too much*, they support a view quite different from his own. As the limestone had been in those hills *for ages*, and the forests for no inconsiderable period, will the Dr. please tell us *why* this "want of appropriation of the liberated carbonic acid," and consequent ague and fevers, *had* not *previously*, and *have* not *since* occurred upon the hills? Again, in this year, the absence of such diseases on the low lands of west side—an unheard of thing to that sage individual, the oldest inhabitant—is a suggestive fact. and *just a little unfortunate* to Dr. Harvey's

argument. The *absence* of the fevers on the *west side*, and the *presence* of the same on the *east side*—each occurring but once in the knowledge of the residents, and both strange events simultaneous, is proof next to positive that the *fevers on the hills were produced by the same causes that had been operative through the many years before upon the lowlands of the other side!* Unusual winds, prevailing long in one direction, or unusual heaviness of the atmosphere, through which instrumentality, the miasms, generated in the lowlands, rose above their origin, and were wafted away to hills near by, are explanations, to our mind, far more probable and philosophical.

We have given this paper attention, not because of any intrinsic worth apparent to us, but because members of the *Hendricks County Medical Society*, before whom it was first read, thought Dr. Harvey's views were the most plausible of any previously advanced, and those dissenting, "agreed that it would be hard to refute the arguments contained in the paper."

Before quitting the paper before us, we would make one other quotation for the purpose of remark: "Dr. Gibbs says 'the miasm of intermittent has a more vegetable origin than that of yellow fever, and its conditions of development are not the same.' Dr. Eberle, on the other hand, says, in his *Practice*, pages 149–50: '1. Yellow fever *always* appears in the *lowest and most filthy* parts of towns; and those localities in which it is most prevalent are in *the immediate vicinity of marshes*, or soils favorable to the production of miasmata, &c.'" Other authorities are cited to prove the same idea. Leaving out the word *marsh*, and we perfectly agree. Had we the time and space at disposal, we would prefer to give our own opinions, than to have them presented by Dr. Harvey. Lacking both, our readers will, we trust, hold us excusable in the following remarks, with a further reference to the *North American Medico-Chirurgical Review*, for January and May, 1861. We have carefully examined the history of yellow fever epidemics, drawn by eye witnesses, so far as we have been able, and now assert, without fear of successful controversy, that the sites of intermittent and yellow fever are quite dissimilar: Yellow *fever* is a *fever of cities*, and *ague* is essentially a *fever of the country*—the former requires for its production a miasm having a preponderance of animal origin, the latter a miasm that is, perhaps, exclusively vegetable. New Orleans presents facts illustrative of this idea and we shall make it a type of the whole. It is well known that this city faces the Mississippi river, and is bounded in the rear by shallow lakes, cypress swamps, and grassy savannas; swamps and marshes virtually hem the city in. To those who will examine the locality of New Orleans and its surroundings, it must be evident that, during the hot season of the year, the swamps in the rear of the city must fill the humid air with their poisonous exhalations. But it is not from this rear of the city only that the seeds of disease and death emanate; for the streets adjacent to the river, for three miles, are compactly built up with warehouses, market-houses, drinking-houses, sugar wharves, oyster houses, cotton presses, etc., from which issues a vast quantity of filth and organic recrements, which foul stratum reeks in the burning sun of the thirtieth degree of latitude, and sends forth noxious exhalations to commingle with those from the swamps, the filthy streets, and the well-filled cemeteries of the city. Every physician, who has been in New Orleans during a yellow-fever epidemic, knows full well that the first and deadliest visitations of this disease are in localities adjacent to the river, *where animal excrements and refuse*, in a state of decomposition, mostly abound. Here agues are almost or quite unknown. In the suburbs, and adjacent to the swamps, intermittents and remittents are the prevailing diseases, and yellow fever there is nearly or quite unknown. Such facts and observations prove our position, that intermittents and yellow fever have both a miasmatic origin, but the respective miasmas differ in gard to the sources from which they eminate. It is useless to oppose the authority of Eberle, who, perhaps, never saw a case of yellow fever, against the authority of such men as Barton, Fenner, and Dowler, of New Orleans, who have all observed the facts above stated. Dr. Blair, who has written an able paper upon yellow fever, has observed the same diversity of origin and locality of the two diseases, in Georgetown, at the mouth of the Demarara river, in British Guiana.

There is another bearing this opinion of Dr. Harvey has, that we consider of the first importance. If epidemics, from a simple intermittent up to cholera, yellow fever, and the plague, be produced by an excess of carbonic acid gas, and that excess is the result of causes beyond man's reach or control, then we must regard these oftentimes terrible and destructive

visitations as the result of a defect in the economy of *nature*, and in no way connected with man's folly and ignorance, or preventable by his wisdom! Our's is a different faith; we believe that most epidemics are preventable by human wisdom and energies; that the most terrible visitations of yellow fever, cholera, or the plague, are but Divine chastisements for man's sinful negligence of the laws of health and of life. We believe that all epidemics have their origin in some vitiation of the atmosphere with the exhalations resulting from decay and decomposition. We get different diseases and different intensities, having a miasmatic origin, because miasms differ in nature and intensity. Many circumstances cause the products of decomposition to vary, as, for instance, a diversity of decomposing substances, varying meteorological conditions, and dissimilar excitants to decomposition—decaying plants, each yielding an aroma peculiar to itself, of which peculiarity the sense of smell is abundantly cognizant. Emanations from *marshes* are dissimilar from those arising from *human animal excrements*; those that emanate from decaying vegetation also might reasonably be supposed to affect the human system differently from such as arise from an over-filled graveyard. The effluvia from damp cellars and filthy stables are unlike; the gasses arising from privies and from slaughter houses or tan-yards, are not identical in sensible properties, and, probably, not in physiological effect. Thus dissimilar sources give dissimilar results. The elements of disease in a city, as New Orleans, for instance, may seem to be uniform, one year with another; the same sources of miasm exist within the city; the same marshes and lakes without; the same sun, latitude, and climate, influencing the whole. But these elements of decay, of exhalation, of miasm, must develope a poisonous compound of varying powers—a virus of different disease-producing qualities. This is the reason why these disease-producing elements give rise at one time to one disease, at another time to another and dissimilar one. Thus intermittent, remittent, and malignant bilious-remittent fevers, yellow fever, cholera, erysipelas, diphtheria, diarrhœa, and dysentery, may each, at different times, be developed, the which being determined by the peculiar products, or combinations of products, of the disease-producing elements.

Dismissing the subject, we would say that yellow fever, instead of being produced by a carbonaceous gas, *cannot exist without the presence of a miasma, having a certain origin, and developed under certain conditions.* This origin, it is presumed, is partially animal and partially vegetable, with an *active preponderance* of the former. The fact that the disease only originates where men congregate, as in large cities, where the air is poisoned by human exhalations and the putrescent effluvia arising from decomposing human and animal excrements, and where, from circumstances, the very water is poisoned with percolations from privies and many other sources of animal putrescence, abundantly establishes the partial animal origin of the miasm. The lowness of site, the alluvial, argillacious, and undrained soil, the surrounding swamps, and, in some instances, the luxuriant growth and large deposit of sea-weed — conditions, with, perhaps, the exception of the last, always present, go to show the partial vegetable origin of this poisonous element of disease. The active preponderance of the animal origin derives support from the well known fact that, at New Orleans, and all other cities where the disease prevails, it first wakes its appearance where the sources of *animal* filth are most abundant, and subsequently the attacks, in other streets, are in the order of the intensity of the animal admixture to the sources of miasm. In New Orleans the animal and vegetable miasms have distinct centres; yellow fever and intermittent fevers have the same and corresponding distinct centres. The *animal* miasmatic centre is along that side of the city facing the river, while the *vegetable* miasmatic centre is at the marshes bounding the opposite side. While yellow fever is prevailing with its deadliest effects in the animal miasmatic centre, intermittents or remittents will be found prevailing extensively in the vegetable miasmatic centre.

The conclusions from the above are, that epidemics are the results of exhalations from a variety of decompositions. The type and character of the disease will be determined by the character of the source, or combined sources of the exhalations.

—o—

Distilled Water of Copaiba.—We have examined a specimen of this article, from Hazard & Co., Twelfth and Chestnut streets. It is said that this distilled water contains all of the copaiba that is actually taken and passed off by the urine when it is administered internally. The article may be taken in ounce doses, or may be used as a vehicle for substances used for injection in gonorrhea. It has but little of the usual flavor of copaiba, and is not offensive.

Medical Societies.

BERKSHIRE (MASS.) DISTRICT MEDICAL SOCIETY.

We find a report of the meeting of this Society held at Great Barrington, July 24th, in *Berkshire Medical Journal*, from which we copy:

Dr. Parks communicated an interesting case of amaurosis in a young man of sixteen, which had lasted for several years, had progressed in spite of the most approved treatment of oculists of reputation, and now involved deeply both eyes. Dr. P. having had his attention called to the subject of amaurosis from spinal irritation by an article by Dr. A. H. Robinson, in the July number of the *Berkshire Medical Journal*, had examined the spine, and found several vertebræ extremely tender on pressure; promised to report the results of treatment at a future meeting.

Dr. Stiles mentioned that the influence of the upper portion of the spinal cord upon the circulation within the eye was well known to physiologists. Budge and Waller had designated that portion of the cord included between the sixth cervical and third dorsal vertebræ by the name of the cilio-spinal region; it is the spinal centre of the cervical sympathetic; irritation of that region was followed by contraction of the pupil, its lesion or section by dilatation. Not only does the cervical sympathetic control the diameter of the pupil, but the circulation, temperature and nutrition of the parts supplied by that nerve.

Dr. Smith reported a case of amaurosis of long standing in a man of thirty-two years of age, which had been pronounced incurable on good authority, which Dr. T. Childs had treated with blisters to the back of the neck, and behind the ears, and the internal administration of iodide of mercury. Entire recovery followed in the course of three months.

Dr. Collins had treated snow-blindness by counter-irritation to the temples and back of the neck, with favorable results.

Dr. Miller had seen periodical amaurosis in miasmatic regions; had found strychnine useful in its treatment.

Dr. Cass presented two specimens of tape worm, one twenty-two feet in length, which had been expelled by the use of pumpkin seeds, followed by turpentine and castor oil—had given in both cases, after a short abstinence, two ounces of bruised pumpkin seeds in the evening, followed in the morning by a half ounce of turpentine, with castor oil. Both cases were of strong, healthy women, affected with disordered digestion, capricious appetite, and strange sensations in the bowels, which symptoms ceased entirely after the discharge of the parasite. In one case, other remedies, such as male fern, kousso, &c., had been previously used, but to no purpose. Dr. C. had seen a large abscess of the mamma in a female infant, three weeks old.

Dr. H. H. Childs mentioned that it was a custom in many ignorant families to subject every new born infant to a treatment calculated to inflame the mammary gland, under the delusion that "something ought to be squeezed out," which would prove injurious if allowed to remain.

Dr. Brewster had treated several cases of diphtheria within the past month; had used quinine and chlorate of potash internally, and local applications of nitrate of silver. In one case, that of a girl of six years, the disease had proved fatal from exhaustion on the tenth day of the disease. Dr. B. remarked on the frequency of sloughing of the tonsils in diphtheria. This result had also been observed by Messrs. Smith, Childs and Cady. Dr. B. also spoke favorably of the use of chlorate of potash in phthisis pulmonalis; gives a half ounce of the salt daily.

Dr. Cady reported the following case for Dr. George Lyman: "Autopsy of Mrs. ——, aged thirty-two. Died October 29th. Post mortem October 30th. Near the anterior extremity of the sagittal suture, and about three lines from the falx cerebri, found a spiculum of bone about five lines in length, irregular, pointed at either extremity; two lines in width and nearly the same in thickness in the largest part, imbedded in a fibrous mass formed by the adhesion of the pia mater to the dura mater; said mass filled with granular ossific deposit. About an inch from this was a nearly circular osseous deposit of about two lines in diameter, and a line in thickness upon the dura mater. Adhesion of the membranes existed for some distance around in irregular patches, and of various degrees of firmness. Strings of adventitious membrane of recent formation appeared irregularly over the anterior half of the cerebrum. The ventricles contained about three ounces of serum. About one-sixth of the mass of the cerebrum in contact with the fluid was of the consistence of thin cream. Grey nervous matter nearly all diffluent—corpus callosum and nerves passing out of the cranium but little more consistent than thick cream. Whole mass of brain soft and white. Vessels over upper portion moderately congested."

General History. — About 10th May, M., weaned a boy over a year old, and about a week after had a well-marked epileptic fit. This was was followed by others, at irregular ineervals, till about the end of August, when dyspnœa came on, growing urgent, till physical examition determined the heart to be crowded over to the right of the sternum, the superficial measure of the left side of the thorax one inch greater than that of the right—dullness extensive. Absorption readily followed treatment, and M. slowly mended for about four weeks, when headache and nausea began to be com-

plained of occasionally. About three weeks before death, these symptoms became very urgent, then gradually exchanged for coma which continued more or less seven days, when death ensued.

Dr. T. Childs reported for Dr. Holcombe a case of injury to the skull in a man of about forty, caused by being thrown from a carriage. The patient was comatose when found, and so remained for several hours, when complete restoration of intelligence took place, although drowsiness existed. Abundant hemorrhage from both ears, and from the wound of the scalp, to the amount of about a quart, according to the estimate of Dr. McAllister. The bleeding from the ears lasted for several hours. Blood was extravasated abundantly into the sub-conjunctival and palpebral tissue, although no evidence existed of a blow on the eye. The patient was partially deaf before the accident, since which, (for three weeks,) the deafness has been complete. Pulse not accelerated until a week after, when it rose to 120 per minute. The ecchymosis of the right eye had not disappeared. *Diagnosis*—Fracture of the base of the skull. The case is interesting on account of the serious character of the injury, with the absence of serious symptoms, and its fortunate termination.

The Society then adjourned to Dr. Collins' Institution, where a most most hospital enterment had been provided, and distinguished guests assembled, and the remainder of the day was given to festivity.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

ERYSIPELAS.

In a discussion upon the subject of erysipelas, before the Buffalo *Medical Association*, as per *proceedings* in the Buffalo *Med. and Surg. Journal*, for August, Dr. Rochester said: "he regarded opium in a full dose as extremely useful, where there was either delirium or great restlessness. Salines, either as cathartics or diuretics, are advantageous, but should not be administered very freely. Quinine and iron, one or both, are required in a majority of instances. The tinct. of the chloride of iron is a good form, and is thought by many to exercise specific control over the disease in question."

We quote the above, because we think it is difficult to be improved upon. Quinine, with Dover's powders or opium, and tinct. of iron, are the remedies upon which, for years, we have placed our reliance in erysipelas. We believe there are thousands of physicians in the country, "old fogies," who stopped reading when they passed the "green-room," who still regard erysipelas as a local inflammation, to be the most successfully met with the usual antiphlogistics. It is for such this article is penned. We have not seen erysipelas as it occurs in the half-starved and broken down constitutions in the city, nor passed through one of those severe epidemics that occasionally visit the country; but, as we have seen it, we have not witnessed a death from this disease under the treatment above cited. Twice we have been called in consultation with other physicians in cases of erysipelas—both were under antiphlogistic treatment—in both we influenced a change to a plan similar to that above cited—in both, this was abandoned, within twelve hours, in favor of the former plan, and both died! We mention these facts in no spirit of egotism; but simply, as such, to be used, so far as they go, as evidence in favor of the superiority of the tonic over the antiphlogistic treatment.

Of *local* treatment, the *Abstract of the Proceedings* thus gives Dr. Rochester's remarks: "Of the supposed line of demarcation, effected by the solid nitrate of silver, he spoke only to condemn it. The tinct. of iodine was useful, but probably inferior to the tinct. of the chloride of iron as a diffuse application." We confess that we have preferred milder applications, such as, on drying, would exercise compression, by contraction, and protect the inflamed surface by a kind of artificial cuticle. Of such we may instance collodion, or that which we have oftener used, *gum Arabic paste*, medicated with a little acetate of lead. Our readers will find a more extended article by us upon this subject, in the Reporter for Augnst 6th, 1859, or (Vol. 2d, p. 377.)

INVERSION OF THE UTERUS REVERTED AFTER FIFTEEN YEARS.

In the Buffalo *Med. & Surg. Journal*, for Sept., Dr. Henry Nichell reports a case of inversion of the uterus which came to him while practicing in Germany, after having been a source of annoyance for fifteen years, and which was successfully and easily reduced. After having reduced the size of the organ by successive applications, for a time, of aqua plumbi to it and the excoriated services, he says, "I grasped the tumor, and compressing it gradually with firm upward pressure, carried it into the vaginal canal, *I then used the thumb and two fingers pressing it onwards*, until at last the womb seemed to be in its natural position." Since that period, the patient, it is said, has enjoyed

excellent health. The manner in which this reduction was accomplished, in the latter stages of that process, shows that *replacement commenced at the neck*, and the fundus was the last to assume its natural position. The ease with which the reduction was accomplished, may lead some to doubt the correctness of one or the other of the statements—the patient's or physician's—the time of inversion, or the facility of its replacement. At present, we have another object in view than that of criticism.

Pertinent to the case above, is one which we believe has never been referred to in our *summary*—a case published in the Chicago *Medical Journal*, for March last. The case occurred in the practice of, and was reported by Dr. R. C. Hamill. The inversion occurred immediately after labor, and during the expulsion of the afterbirth. The placenta was attached: we now quote the author: "I pulled off the attached portion as quickly as possible, and grasping the inverted part, which was firmly contracted, and consisted of the body and fundus, endeavored its immediate reposition, but without success. *I then tried to indent the fundus with my thumb, but could not make the slightest impression on it.* Whilst the uterus was in my grasp, I discovered that the walls of the left side appeared to be softer and thinner than any other portion of it, which fact suggested the idea of beginning the reposition at that point. Accordingly, with the fundus resting on the hollow of the hand, I made pressure *with the ends of the fingers* upon the weakest portion of the walls of the body of the womb, indenting it, and at the same time pushing the fundus upwards; I succeeded, with comparatively little effort, in carrying the inverted portion to its place, the *fundus being the last* to reach its normal position. My hand was not withdrawn until the contraction was complete. The patient rallied speedily and asked for her child." It will be seen that, in both the cases alluded to above, the *replacement commenced at the neck*, and, to our mind, it is more than probable that the *inversion* took place in *like manner*. We are of the opinion that failures to replace an inverted uterus have occasionally occurred, because of the attempt to *indent the fundus*, and thus to commence the replacement at the *wrong extremity*—the attending physician, entirely unmindful of the easier and more natural way.

Our readers will find a brief statement of our views of the *manner* of inversion of the uterus, in the Reporter for July 6th, and August 17th, of the present volume.

CHLOROFORM IN CHOLERA.

In the San Francisco *Medical Press*, for January, which, by the way, has but just reached us. Dr. J. Rowell has an article upon *chloroform*, from which we extract the following: "Ten years since, I gave chloroform, by inhalation, in *Asiatic cholera*, with a view to relieve pain only, morphine and opium, in enormous doses, having proved unavailing, being rejected by the stomach as soon as swallowed. To my agreeable surprise, all vomiting and cramps ceased, and my patient was perfectly free from pain. In this condition, the appropriate remedies were tolerated by the stomach, until their therapeutic action was fully established, and the disease controlled. Subsequent trials led me to repose great confidence in chloroform in the treatment of cholera, not so much as a curative, properly speaking, but as an agent to hold the patient stiff, so to speak, while other remedies could work a cure."

Bearing upon this point, it may not be unprofitable to refer to a paper by F. W. White, M.D., published in the St. Louis *Med. and Surg. Journal*, for May, 1860. Speaking of typhoid types of disease, which types or conditions he believes to be neuropathic, he says: "If it be true, that there is either irritation, depression, exhaustion, or alterations, of the nervous system, then we have an indication to fulfil, for which we have no remedial agent upon which we can always rely. Stimulants excite too much, while narcotics are followed by too great a depression. I think there is no agent more efficacious, or less objectionable than chloroform; this is true not only in fevers, but in all diseases characterized by *exhaustion of nerve-power*." Cholera presents a well-marked example of nerve exhaustion, and, according to the statement of Dr. White, chloroform should be expected to act, as Dr. Rowell says it does, happily. Dr. White also makes a remark upon the therapeutic action of chloroform, which we think is correct, and which would indicate that remedy in the disease under consideration. It well deserves quotation here: "Its therapeutic action is, *first*, by its controlment of the heart's impulse, modifying the excited and irritable to a regular and less frequent action, and causing the respiratory movements to be slower and more complete, *thus effecting a larger elimination of carbonic acid, and relatively less introduction of oxygen; second*, by its stimulant effect upon the molecules, *increasing tonicity of nerves and other structures, and thereby promoting assimilation; third*, by its chemical action, *retarding oxydation in the tissues*." The italics are ours. All three of these actions are desirable in cholera, and hence, we may urge the experience and authority of Dr. White, in favor of the statement made by Dr. Rowell. We should observe here that Dr. White would administer it in such cases by the mouth.

Dr. Powell is not the first to use chloroform in cholera; but that fact does not, of course, detract from the utility of the remedy in such cases. Dr. Thomas D. Mitchell, in his work on *Materia Medica* and *Therapeutics*, makes the following remark:—"A case of cholera is reported by a physician as cured promptly by this

medicine. It was in his own person, and he had no other article at hand, and inhaled it until he became unconscious and fell asleep. He awoke in a decidedly safe condition." (See page 293.)

Before quitting this subject, we would remark that Dr. Leczynski, in the *Western Journal of Medicine and Surgery* for 1852, recommended *chloric ether* in cholera, in the dose ʒ ss. to ʒ j. every half hour, or *chloroform*, in doses of seventy to one hundred drops, administered in milk, every quarter or half hour. He says, "It stimulates, exhilarates, coagulates protein bodies, promotes the excretion of bile, soothes and produces a temporary anæsthesia of the voluntary apparatus, but at the same time produces an increased action of the ganglionic nerves, and the organs they enter."

FRACTURED PATELLA—TREATMENT OF.

In the *Medical Press* for January, Prof. E. S. Cooper, of San Francisco, makes the following remarks upon the treatment of the above-mentioned accident:—"Our method of treating transverse fractures of the patella, and one which has, thus far, been invariably successful, is as follows: Make a longitudinal incision, of sufficient length to expose the fragments; drill the anterior margins of them with a drill, one line in diameter; then pass a silver ligature through the holes thus made, and, by crossing the ends and pulling stoutly upon them, bring the separated parts together. A knot is then made by twisting the ends of the ligatures together, which holds the factured portions of the patella in apposition, by which a *bony union always takes place.*"

As essential to success, Prof. Cooper insists that the wound be healed by granulations, and not by first intention. To this end, lint should be placed in the wound, and the limb tightly bandaged from the toes to the middle of the thigh. The dressing he would advise to be changed only once a week. At the end of the third week, he would omit the lint, but continue the bandage. The wires should be removed at the end of six or eight weeks. He concludes by saying, "After the operation of applying metallic ligatures in this way, the patient scarcely ever suffers to any considerable extent, and generally remains entirely free from pain during the whole course of treatment; but, in order to have it so, the *keeping of the wound open and the application of the tight roller are indispensable.*"

ARSENIC IN UTERINE HEMORRHAGE.

Before the *San Francisco Medical Association*, as per report in *Medical Press* for January, Dr. Cole, speaking of arsenic in uterine hemorrhage, said "he had found it succeeded admirably in controlling hemorrhage following abortion, and that, when the flowing was great, it acted like magic, in doses of ten drops of Fowler's solution." For ourselves, we do not believe that hemorrhage, after abortion, very often occurs, unless the secundines are left behind. In that case, their prompt removal puts an end to the hemorrhage at once, and the patient is freed from anxiety, and placed in a condition of safety. Without such removal, we do not believe that *arsenic* or *ergot* is to be relied upon. We have treated many cases of post-abortional hemorrhage, and we, of late years, put an end to the hemorrhage at once, by emptying the uterine cavity of its contents. But little medicine is then required.

MUTES.

The total number of deaf and dumb persons in France, is 21,576. Of these, 12,325 are males, and 9,251 females. The proportion, with respect to population, is 1 deaf and dumb person in 1,669 inhabitants; 1 in 730 men, and 1 in 939 women.

ASCITES COMPLICATING PREGNANCY.

When, in a case of this kind, all the dropsical effusion is evacuated by means of the ordinary trochar, and at one time, contraction of the uterus generally comes on at once; abortion or premature delivery, therefore, may be the consequence. To prevent this accident, M. Pigeolet advises a simple puncture to be made with a needle or a capillary trochar at the umbilical bulging, which almost always exists in these cases. The liquid escapes, drop by drop, and the danger of miscarriage is avoided. M. Pigeolet has employed this method in one case with entire success.—*Journal de Médecine de Bruxelles.*

TREATMENT OF INGROWING TOE-NAIL BY PERCHLORIDE OF IRON.

This painful affection, which has seemed to obstinately resist all treatment for its radical cure short of excision, is said to be permanently relieved by the application of perchloride of iron. The suggestion is from M. Wahn, Physician of the Military Hospital at Nice, and is published in the *Gazette des Hopitande.* M. Wahn gives the following account of his experience in the treatment of his own case:

"I was struck with the idea that, if I could dry up or even *tan* the diseased surface, so that the ulcer might be converted into a firm surface, capable of resisting the cutting action of the edge of the nail, I might obtain a complete cicatrization, and consequently a cure. Run-

ning over in my mined the most energetic tanning substances, I decided on employing the *perchlorure de fer*. I obtained some in a powdered form, and insinuated it as deeply as possible between the free edge of the nail and the ulcer. I felt almost immediatefy a moderate sensation of pain, accompanied by a feeling of constriction and a strong, burning sensation. A quarter of an hour after I attempted to walk, and, to my great satisfaction, I found I could bear my weight on my foot throughout its entire length without the least pain—a thing which I had not done before for many months. The following day I carefully examined the diseased parts, and found them mummified and as hard as wood. I applied a fresh quantity of perchlorure de fer, which I allowed to remain for a quarter of an hour; but I have reason to believe this application was useless, as the mummification was complete bp the first process. I continued to walk without the least thought of *ongle encarné*, and about three weeks after was able, by means of a pediluvium, to remove the hardened layer of skin, under which I found a tissue of new formation, which perfectly resisted the pressure of the edge of the nail. Shortly after the whole had returned to its normal condition, and, since, more than two years have passed without a return of the disorder." —*Boston Medical Journal.*

EXPULSION OF TÆNIA BY COPPER.

Dr. Thienemann, of Prussia, says that he has invariably succeeded in expelling tape-worm by oxide of copper, administered in one-grain doses four times a day. The doses, he says, may be much increased without bad effect.

ON REMOVAL OF THE CERVIX UTERI.

The safety and desirability of removal of the neck of the uterus in certain abnormal and diseased conditions, may still be regarded as questions *sub judice*. Notwithstanding the success which has attended this operation in the hands of Lisfranc, Hugier, and others,—still, fatal results have ensued, which have led some practitioners to regard this procedure with a reasonable dread. It appears that the two following important questions have yet to be decided:—1st. What are the most suitable cases? and, 2d. By what means can the removal be most safely effected? As a small contribution towards the settlement of these points, I beg to submit the following facts to the attention of your readers:

I may mention that a similar case, at which I assisted, with equally satisfactory results, has occurred in the practice of one of my colleagues. Mrs. H. applied at the Samaritan Hospital on March 18th last. She stated that her age was twenty-five, and had been married six years, but had never been pregnant. Her complexion, fair and ruddy, was much pitted by the small-pox. She commenced to menstruate when between fourteen and fifteen years of age, and always suffered more or less pain about the back and loins a day previous to the appearance of the discharge, which was free, not clotted, and lasted from four to five days. She has generally enjoyed excellent health. On one occasion, however, about two years and a half ago, the catamenia continued about eleven weeks, and was attended with great pain; the discharge was bright red, and she is sure "no lumps came away." Before marriage, she had no idea that "anything was wrong;" but shortly afterwards a "swelling came down," which so interfered with her duties as a wife, and led to such frequent disagreements with her husband as to induce her to seek my advice. The swelling, at first small, gradually increased to its present size. For the last two years, the catamenia have become very scanty, lasting about five days, and always attended with much pain.

A vaginal examination detected the cervix uteri protruding between the labia to the extent of an inch, considerably enlarged, corrugated, but not unduly sensitive to the touch. On passing the finger to the extent of about two inches over the growth, which was clearly an hypertrophied cervix, a line of demarcation was distinctly felt, which appeared to indicate the healthy from the diseased portion. The sound passed easily through the os into the body of the uterus to the extent of five inches and a half—three inches beyond the normal distance.

On May 17th, after a consultation with my colleagues, I proceeded, while the patient was under the influence of chloroform, and in the presence of Drs. Savage and Routh and others, to remove about two inches and a half of the cervix with the écraseur, which took about half an hour, during and after which scarcely a drop of blood was lost. She progressed most satisfactorily for ten days, when the catamenia appeared, and for the first time without pain, somewhat more copious, and lasting a week.

On June 1st, the wound of the cervix was healthy, and the os uteri pervious; tepid water to be injected into the vagina twice daily.

On the 10th and 17th, the nitrate of silver was applied.

On the 25th, she again began to menstruate without pain, and lasting five days.

On July, 11th, a careful examination detected the cervix of normal size and structure, the wound having quite healed; the os uteri was pervious, and easily admitted the sound to the extent of three inches.

Some time was occupied in adjusting the écraseur, which might have been avoided by transfixing the cervix with a vulsellum, and drawing it beyond the vulva; but it was deemed far more judicious to effect its removal while the uterus was *in situ*, a principle I would strongly urge upon those who undertake similar operations upon that organ.—*Med. Times and Gazette.*

THE MEDICAL AND SURGICAL REPORTER.

S. W. BUTLER, M. D. }
R. J. LEVIS, M. D. } Editors and Prop's.
L. C. Butler, M. D., Assistant Editor.

PHILADELPHIA, SATURDAY, OCTOBER 5, 1861.

COMMENCEMENT OF THE SEVENTH VOLUME.

To-day the Medical and Surgical Reporter enters upon the fourth year of its publication in the weekly form. Scarcely any three years in the last twenty-five could have been selected which were more unfavorable for the inception of such an enterprise. Its record for that period of time is before the profession; and the fact that it commences the seventh volume with a larger subscription list than it ever had, and that it still lives despite the adverse influences which, during the last few months, have compelled many of its cotemporaries to suspend their publication, is not only an evidence that its pages supply a felt want of the profession, but that its efforts to elevate the standard of medical education are rightly appreciated. As in the past, so in the future, the conductors of the Reporter will labor to the utmost of their ability, to meet fully the wants of the profession. Our standard of excellence is high, and, while we strive to realize that standard, we invite to our aid the whole profession. As in the flowers of the woods, poisonous as well as innoxious, there is contained an abundance of sweets, which the "busy bee" must gather, in order that honey may be compounded in its cell; so. stored away among the mass of our noble profession are rich mines of excellence and knowledge, which it is the great object of this journal to collect togther, for the benefit of each and every member; and a reference to any single number, or more particularly to the index of a volume, will show not only the diligence with which we labor to this end, but also that the talent of the profession is enlisted for the same purpose through its columns; and even the troublous times through which we are now passing in our country's history, fails to diminish the number, variety, and value of the original communications which are furnished for its pages. And now, as the winter-months approach, the lecture and clinic season will afford us still further and rich material, from which to cull for the gratification of our increasing number of readers. It is our ambition to make the Reporter the medium of weekly communication between members of the profession in all parts of the country; to render its visits a necessity with which they cannot dispense; to merit their patronage and good will.

It is, then, a fitting time to remind correspondents that "brevity is the soul of wit," as it is the primary object of our journal to be a vehicle for the circulation of ideas and facts of a *practical* kind. Speculative, theoretic, and extended essays are more appropriate for journals that are published less frequently, and that contain a larger number of pages in a single issue. There is a class of subjects, however, that can be treated of in successive numbers of a weekly journal, each paper being, in a measure, complete in itself, and yet the whole series forming a connected essay on a given subject. Several series of this kind have been furnished to the readers of the Reporter. In this way some of our best standard medical works were first published through the pages of the two great weekly medical journals of London—the *Lancet* and the *Medical Times and Gazette.*

THE ABUSE OF CHILD-LABOR.

There exists no greater discredit to the huhumanity of the age than the toleration connected with child-labor in England. Our own sectional blight of negro slavery appeals less to the instinctive sympathy with injured innocence. The child of the negro slave of the rice swamp spends his time in play, and grows up with vigor. The poor white factory child of England is blighted in almost infancy, is broken in health and spirit by toil and restraint, becomes cachectic, and probably ends a miserable existence in a public hospital.

Fortunately the subject is receiving a philanthropic attention which, it is hoped, will mitigate the slavery of children. Some years ago the subject of the abuse of child-labor was investigated by a Commission appointed by the British Government, and its cruelties were exposed, and its evils lessened. The helplessness of the innocent objects of the abuses makes their condition demand a continual watching.

The *Lancet* says that in some new departments of manufacturing, the abuses connected with child-labor are so great, that a new inquiry has been deemed desirable.

At the last investigation through the Commission alluded to, the *Lancet* says that it was ascertained "that children were set to work by hard-hearted and rapacious parents as early as three and four years of age! and that, in general, regular employment commenced between seven and eight. Pins, earthenware, machine-lace, hosiery, etc., were made in part by mere infants. Sometimes this forced and monotonous labor was continued from thirteen to fourteen hours consecutively; whilst the instances were rare in which the regular hours for work were less than twelve. Corporeal punishment was often inflicted upon children, they being sometimes severely, and occasionally cruelly used. In one branch of manufacture, in a particular district, the treatment was found to be oppressive and brutal to the last degree. It was also found in one town that hundreds of men were supported by the earnings of their wives and children, the former too often spending for purposes of drink the money they might occasionally earn themselves. Where physical wretchedness and suffering are as great as this, the condition of morals is necessarily of the lowest kind; and this it was ascertained to be. Education in such homes as were described by the Commissioners was either useless or impossible; and and the state of the females was deplorable in the extreme, Early death, crippled forms, and distorted limbs, with all their disabilities, and protracted suffering, prevented most of these wretched girls ever rising to the dignity of a wife and mother. Such a terrible picture, in fact, was presented by the effects of allowing parents and guardians to put young children to manufacturing labor that, after an attentive consideration of the reports the several Commissions, Mr. Senior remarked:

"'We look with shame and indignation at the pictures of American slavery, but firmly believe that the children at the worst managed plantations are less overworked, less tortured, better fed, and quite as well instructed, as the unhappy infants whose early and long-continued labor occasions the fabulous cheapness of our hardware and lace, and whose wages feed the intemperance of their parents.'"

We will not assert that in respect to the abuse of child-labor we are entirely guiltless; and a Commission, such as that appointed by the British Government, might indeed disclose instances of oppression of young children to labor, and to a bondage to daily and nightly toil and confinement which debars them the advantage of mental improvement.

Such may be the case in some of our manufacturing towns, the populations of which, in habits and pursuits, resemble the factory workers of England. If such an oppression of young children does exist among us, their physical failings must come under the observation of medical men, and to them we would appeal for its exposure and public condemnation.

——o——

EDITORIAL NOTES AND COMMENTS.

Important Suggestions for the Army.—Dr. C. F. W. Haase, Surgeon of the Fifth Regiment, New York State Militia, in a recent letter, makes some suggestions from his experience in camp-life, which are worthy of note. Among the causes which, in his opinion, "are already at work to undermine the health of the army," he mentions the salt pork which the purveyors of the army are furnishing for the soldiers. He says in his encampment, he was compelled to condemn this article "at three different times," it having at one time "so poisonous an effect, that nearly a whole company were taken after dinner with severe vomiting and prostration." He recommends in its stead smoked bacon as being more nourishing and digestible. The coffee also, he says, was frequently mouldy and of very inferior quality. The constant use of dried beans, he judges, to be hurtful from the fact that whenever this article was served to the men, he always had a large number of patients suffering from colic, diarrhœa and vomiting; and from the fact that this state of things was changed, when the regiment was served with dessiccated vegetables. He suggests the attachment of a field bakery to each brigade, so that the soldiers may be supplied with good bread instead of the hard biscuit now used. Dr. Haase does not believe in the total abolition of spirituous liquors among the soldiers; occasionally it should be furnished to

them. "Whenever the Regimental surgeon should deem it necessary to issue a whiskey ration it should be done; however the quality should be good and the quantity small." Why should not this article be placed in the same category with other medicines, and prescribed when necessary, in the same manner, and under the same restrictions? The testimony of Dr. Haase on this point corresponds with the opinion of all the most eminent surgeons of the age. The use of liquors, such as are usually furnished, is deleterious to the health of the army, and tends only to produce utter demoralization. Especially is this the case with lager beer, which, he says, invariably produces diarrhœa.

In regard to ambulances and their management, the Doctor makes some excellent suggestions. "Each brigade should have a company, whose duty should consist in taking care of the litters; carrying the wounded from the field of battle to the surgeon's department. They should be taught to apply a bandage and put on a tourniquet in case of need." The suggestion here made is in part carried into effect by the appointment of medical cadets, but the necessity still remains of detailing men from the ranks to take care of a wounded comrade.

But still further he suggests the adoption of the celebrated Stromeyer's plan, by which he was enabled to attend to the more severely wounded first. To accomplish this object, he directed a a red flag to be stuck in the ground near the severely wounded man, so that the litter bearers might be directed at once to the spot. Thus many lives were saved. The same surgeon also ordered each man to put a bandage on the top of his knapsack before going into action, so that this needful article might always be at hand.

Ambulances for the Pennsylvania Reserve Corps.—We find in one of the daily papers a notice of the ambulances which have been prepared under the personal inspection of the Surgeon General of the State for the Reserve Corps. These carriages are of two kinds, one for four or two horses, capable of carrying four soldiers lying down, and eight sitting up, and another for one horse, capable of carrying two at full length and four sitting. Each carriage is provided with the latest improved platform springs, and contains inside one or more spring-mattrasses, composed of wire springs and the best curled hair, covered with india rubber cloth. The mattrasses are so arranged on light frames that they roll readily into and out of the body of the carriage. When lifted out of the carriage by their handles, four legs fall to the ground and support the bed in a manner similar to a hand-barrow. In addition to this, each bed is so jointed that any portion of it may be elevated at pleasure, thus securing an easy position to the wounded. Close curtains, with glass, capable of rolling up in sections, with ventilating slides at different points of the body, secure the comforts of shade and fresh air, whilst insuring protection from the weather. Each carriage has hooks and a rack to carry the soldiers' arms and clothing, with various pockets for surgical dressings; in addition to which, each one is provided with a large barrel of water to slake the sufferer's thirst. They were manufactured in this city, and the whole number—sixty—were completed in thirty days time. A hospital transport cart accompanies every four ambulances, and carries all the hospital furniture, medicines and cooking utensils for the sick and wounded, either on the march or in camp. The organization and equipment of this body of men is now complete. Every thing requisite to their efficiency as *combatants* is in the most perfect order, and equally complete arrangements have been made by the provision of medicines, instruments, hospital tents, ambulances, and medical officers of a high grade, to remedy the physical evils to which they may be exposed in the performance of their duty as soldiers.

Medical Heroism.—"*We cannot leave these bleeding men; it is our business to take care of them, and take care of them we must, no matter what becomes of us.*" Such was practically the heroic reply of Surgeons Foster, Swift, and DeGraw, of the Eighth New York Regiment, as they were urged by a United States officer to leave the soldiers whose wounds they were dressing. To all human appearance death must be their lot, for the enemy were approaching, and would give no quarter, their position would be shelled, or they bayoneted, they were told. Still these brave surgeons stood firm at their posts, and so determined were they to perform their whole duty, that when there came a rush of cavalry and a hoarse voice, behind a pistol, demanded, "Do you surrender?" the reply was "Certainly," while they continued the amputation they had begun, tying the arteries and

finishing their dressings, as though in a surgical ward unmolested. Such an instance of heroic bravery in the midst of the general stampede of that memorable occasion, is deserving of perpetual record. Its heroism is far above that of the mere combatant. It reaches a height of sublimity which the hero of a thousand battles can never attain. Let their names be honored.

A Word to Subscribers.—With the Reporter, for September 21, we sent notices to those of our subscribers whose subscriptions expired with the present volume. This is in accordance with our usual custom. In some instances, through inadvertency on our part, or neglect of our agents, notices may have been sent to those whose subscriptions do not expire at that time. In every such case we shall be most happy to correct the error, upon information of it, and would specially request all such to inform us at once. Mistakes sometimes occur in the best regulated offices, and by us will be always most cheerfully and promptly corrected when made known.

The Philadelphia County Medical Society meets, we are informed, on Wednesday evening next, Oct. 9; subject of discussion, *Puerperal Convulsions.*

The Northern Medical Association meets on Friday, Oct. 11, with the same subject of discussion.

We have been informed that the recent announcement of the suspension of the course of the Pennsylvania Medical College, has been erroneously understood by some individuals residing at a distance, as referring to the University of Pennsylvania. Our correction of the error is unnecessary to most readers, who must be familiar with the latter named institution.

The session of the University of Pennsylvania will commence as usual, as may be seen by referring to the announcement in the advertising columns.

Dr. Neligan, the able conductor of the *Dublin Quarterly Journal of Medical Science* for twelve years past, has relinquished its management, owing to the pressure of other engagements. Dr. Geo. H. Kidd, who has been a large contributor to its pages, is the new editor.

The Medical Times and Gazette records the instance of a man who was "smashed in a most awful manner" by a body of rock, weighing about five tons, falling upon him. And yet "his heart was found entire about five yards from the body, and, when first seen, actually palpitated. An arm, likewise, was literally cut off and thrown from the body."

A New Hospital.—The hospitality of Philadelphia towards the noble men who have volunteered to defend the Constitution and the Union, has, it would seem, culminated in the proposed erection of a hospital for the sick and wounded, the corner-stone of which was laid on Wednesday last, at the foot of Washington street, between the Refreshment Saloon and the river. The building is to be 32 by 22 in size, of wood, and is intended to furnish accommodations for renewing the bandages, washing the wounds of returning soldiers, so that they may be forwarded in a state of comparative comfort on their way home. The corner-stone was laid by Ex-Governor Pollock, and contains the American flag and a picture of the Refreshment Saloon. The names of Dr. Ward, C. Myers, and B. A. Brown, are mentioned as Committee of the Hospital.

Amputation, an Important Suggestion.—At his Clinic on Wednesday last, which terminated his service, Dr. Hewson made an important suggestion in regard to amputations of the leg, which we take occasion to note down for the benefit of our readers. In these amputations, he remarked, the injunction is to make the stump as long as possible. This must be taken with limitations if the patient is to be provided with an artificial limb. If the stump be made too long, the ankle of the artificial limb will necessarily be larger than the natural one, a matter of some consideration if the patient be a female, and of vast importance to the artificial limb maker, the perfection of whose art is, to make it serviceable, and to render it difficult to distinguish the artificial from the real one. For this purpose, therefore, the amputations should be made from two to three inches above the ankle-joint.

A Medical Charity Fund.—The *British American Medical Journal*, in recording the application of a worthy physician, for an allowance from the funds of the College of Physicians aud Surgeons of Lower Canada, and its refusal

on the ground "that the Board of Governors had no power so to dispose of the funds of the College, and moreover, because the petitioner was not a member of the College," takes occasion to compare the three leading professions, with reference to the compensation afforded by each as a fund for support in declining years. Its observations are not only just but appropriate, and offer a strong argument in favor of the formation of a "benevolent fund," from which disabled members of the profession, their widows and families, (always premising worthy) may be aided in their extreme necessity. Its language is as follows:

"Of the three professions, Divinity, Law, and Physic, it may be said, that the representatives of the first class scarcely do more, from the scantiness of their annual salaries,—which is barely sufficient in the large majority of instances,—than support their families, and maintain their external appearance as gentlemen. Hence in most of the churches provision has been wisely made, in the event of their demise, for the support to a certain extent of their widows and families. The members of the second profession,—whether by the industrious pursuit of their calling, or their preferment to offices of place and power, which seems, however absurdly to be considered as centred in it, continue in the majority of instances not only to possess an abundance of this world's goods, but are enabled also to leave fortunes to their families. With the third class, whom we represent, and than whom none toil more severely, whether by mind or body, through heat or cold, through wet and dry, by night and by day, how many let us ask, how many by their own fruitful toil, unaided by extrinsic circumstances, are enabled to leave even an adequacy for the support of their families? Very probably not one per cent., and we have little hesitation in stating, that the labor in the profession of medicine is immeasurably more severe than in either of the two sister professions. And usually with so poor a prospect for those who propose entering its pale, there must be something beyond the mere love of lucre which tempts and attracts. What that is which can thus inspire men to devote ther lives to the relief of a suffering humanity beyond an influence so powerfully operative in ordinary minds, any one who has once imbibed its limpid streams can tell. We do not arrogate for our profession a pre-eminence over the others. Far be this from us; for as much as human salvation transcends in the sublimity of its object everything of a sublunary character, so must the palm in this respect be awarded to the profession of Divinity. But if our profession has to succumb in such a respect to the nobler one alluded to, it yet as much transcends that of law, as the salvation of human life is not to be measured by pounds, shillings, and pence. That there is something peculiarly attractive in the study of medicine consists in the fact, that independently of its high and almost holy mission, there is no subject connected with natural science of which it does not, may not, take cognizance. Hence there is none, with the exception mentioned, which induces its student to search more narrowly, and recognize a "nature's God;" and therefore none which can induce a man for that sake, who is thoroughly imbued with the true feelings or principle of his profession, to devote his time, which is his means, to works of benevolence and charity. How much of a physician's time might have been devoted to profitable pursuits which might have enriched his purse, let the history of every physician pronounce, no matter what his present status. Hence there must exist little wonder why physicians generally die poor, leaving nothing for their families but a name, it may be possibly among the honored ones of the earth, but a *vox et præterea nihil.*"

Correspondence.

DOMESTIC CORRESPONDENCE.

Belladonna in Diphtheria.

Philadelphia, *October* 1, 1861.

Messrs. Editors:—Notwithstanding the fact of my having been quoted in your "Summary," of September 14, by Dr. Gibbs, in such a way as to be considered an advocate of this treatment, I beg the privilege of saying that I have but little confidence in it, and that I most certainly never wrote in favor of it.

I do not wish to make a sweeping condemnation of it, but surely never recommended it, not even in conversation, much less in print, which latter I make it a point never to do with anything until after a fair trial in my own practice; and this I have never given to the use of belladonna in diphtheria. And my reasons are as follows: First, I have never seen it recommended in such a way as to show me satisfactorily that it was *the* remedy for the disease, either by theory or effect. Secondly, my ideas of the disease and remedy are such, that I do not conceive how or why the one should be applicable to the other under any ordinary circumstances. The Doctor's mistake—at least with regard to my writings—lies in the fact of confounding common sore throat with diphtheria, a position, in my view, as wide of the mark as that other theory which unites this latter disease with scarlatina.

Where he quotes me, I was clearly, emphati-

cally, and *only* speaking of its use in ordinary sore throat, and exclusively in the incipient stage; and not once throughout the whole article, did I even allude to diphtheria. And another years' trial bears me out in what I then wrote, viz: "My experience with it in incipient sore-throat would lead me to rank it almost as a specific, if used sufficiently early. My plan is to give the sixtieth of a grain of atropia," or the quarter of a grain of the extract, "and I rely upon it confidently if given within six hours of the first appearance of inflammatory symptoms. I have tried it repeatedly upon myself, as well as others, and yet have to note the first failure."

But, to have given me an impartial hearing, he should have continued where I stated that, "After six hours,"—not of the physician's attendance, but of the disease—"I have found it of much less advantage, and beyond twelve, have even thought it productive of aggravation."

One dose, or at most two, at an interval of several hours, is all that I give for the above purpose; and should this not suffice, it would be best to give something else.

I will quote, also, my explanation of its action, which I still see no reason to change:

"It is well known that it has a peculiar tendency to the throat—as much so as ergot has to the uterus—producing a dryness and constriction of the fauces, a change of voice, etc.;" and I infer from the results that "its *peculiar* and anodyne properties act as repellants against the determination of fluids toward the inflaming tissue—a necessary part of inflammation—and, by allaying the nervous excitement, allowing the healthy action to be resumed, which, in the incipient stage, may readily be done, there having been, as yet, no effusion or change of structure; but at a later date, change having taken place, and the fires of inflammation glowing virulently, it ceases to be applicable; perhaps, from the dry surface produced, allowing the atmospheric oxygen to come into ready contact with the superabundant blood and other fluids now present, and thus adding fuel to the flame. A blast of wind will readily extinguish the new-born blaze, but allow it a few moments existence, under favorable circumstances, and then all the winds of heaven will but add fierceness and fury to its life: and just as the fireman would now throw on torrents of water, instead of trying to blow out the fire, so the physician must change his tactics as inflammation advances or takes on new forms."

You will readily perceive, by referring to the article quoted from, Vol. 5, page 137, that I only had reference to the treatment of ordinary angina in its earliest stage, by this medicine, and by turning to page 125 of Vol. 6, commencing at the last line on the page, you will see that, after having spoken of the use of chlorate of potassa in diphtheria, I state my belief and experience that after the inflammation is *fairly established* even in simple angina, the chlorate is one of our best remedies, if not the best, though it should be aided by rubefacients externally, and occasionally by medicated gargles.

Now, how it is, that from any one, or all, of these statements, I should be quoted as an authority in an article of the "Summary" headed "Belladonna in Diphtheria," is to me a most puzzling problem.

Indeed, my belief, as might easily be gathered from the two articles from my pen, already referred to, is, that belladonna is not useful, but deleterious in established inflammation of the throat from whatever cause. And if so, certainly inapplicable in diphtheria by the time it can be diagnosed as such: *i.e.*, by the time that the inflammation has advanced to the point of exudation of false membrane.

Furthermore, diphtheria not being a local disease, but, as I have heretofore expressed myself, Vol. 6, page 125, "a systemic disease with a local manifestation," in which "if you correct the derangement of the system, the local trouble is at the same time corrected;" it requires specially to be attacked through the system, and for this purpose I know of no remedy that acts better than chlorate of potassa, so administered, and such attention being paid to the cleansing of the throat, that its marked local effect may also be secured.

This latter effect is secondary in importance it is true, but not to be overlooked in a disease where every beneficial influence is needed, and where, at best, death will ever and anon override the most consummate skill.

N. B. Should any one be induced, either by Dr. Gibbs' article, or the present one, to revert to the one in Vol. 5, they will please make the correction in the text as directed on page 184 of the subsequent number.

J. W. Thompson.

NEW YORK CORRESPONDENCE.

"Non ego mordaci distrinxi carmine quenqam,
Nulla venenato est litera mista joco." *Ovid.*

Having leisure for specific purposes, I moved on, the other day, with the "profanum vulgus," with a view to gaze upon the Hospital College and College Hospital embraced within the comprehensive and generic phrase of "Bellevue." While waiting for some learned cicerone to escort me through the by-ways of sickness and the fetid paths of duty, I ascended to the amphitheatre of the hospital proper, and beheld the skillful Mott (Alexander) remove a testicle, the sad result of constitutional peculiarities. The deed was done with a becoming carefulness, and in accordance with the proper principle, "festina lente."

Through the courtesy of Drs. Fernandez and Fish, the mysteries of the penetralia were laid bare to view, and the essential features of the

new medical alembic disclosed for future criticism. I leave romance, and, with the fittest brevity, enter upon the task of a description.

There is nothing peculiar about the brown outside of the building to elicit comment; but, on entering the lecture room, I found a model in the way of neatness, comfort, and surroundings of a cheerful character. The gradually rising, cushioned seats—the admirable distribution of the clearest light—the proper situation of the operating table, whither every student can cast optical reflections—at once revealed the capabilities of such a room, the vast importance of its excellent acoustic principles, and the normal faculties of him who planned the auditorium.

Prof. Doremus, who so gracefully combines the gentleman and scholar when about to lecture, opens two wide folding-doors directly opposite this semi-circle of collected students, where his apparatus is arranged within the laboratory, and the interesting series of experiments may be witnessed without that hurried movement incident upon the foolish custom of employing separate rooms for every learned doctor who desires to instruct the lucid minds of those intent on science and collateral affinities.

The lecture room could comfortably accommodate some three hundred aspiring students. I particularly employ this term, "aspiring" in contradistinction to those I designate "respiring;" the former indicate sitting listeners; the latter, lazy loungers, who deform the body in proportion as their minds are crooked and, reclining with their unhooked legs, drink in the drowsy tinklings of last night's debauch. The list of names of the professors who engage to enter on the pleasing duty of indoctrinating the soundest precepts, is itself of no small weight. Profs. Wood, the practical; Sayre, the bold; Doremus, interesting; Barker, energetic and experienced; æsthetic Elliot, who embodies poetry and practice, skill and sagest sense, promptness with propriety; Flint, the conscientious; Taylor, richly endowed; Hamilton, *the* surgeon; McCready, a suggestive lecturer; Teats, Masly, and Tim. Childs, efficient when desired; and Charles Phelps, a promising physician, who, unlike most of his race, doth keep his promises. With this array of really qualified portrayers of pathology and hygienic axioms, combined with the immense store-house of accommodating legs that "must come off;" arteries that need immediate ligatures; women "ever to be blest," and all diseases that require demonstration, (and occasionally bronze disorders,) how can he who is possessed of ordinary mental aptitude, fail to drink freely of this stream and rise to eminence and public estimation.

Prof. A. K. Gardner, of this city, who edited Tyler Smith's lectures with ability and useful suggestions, has lately appeared before the medical world as the translator and annotator of "Scanzoni's Diseases of Females." This book has been appreciated to the fullest extent, in the original, by those who were enabled, by their educated talents, to peruse it in the native language; but the vast majority of the profession were deprived of its utility from want of an American edition. Dr. Gardner's translation is easy and natural, free from the bombast of a pedant, and as nearly as possible allied to the exact meaning of each sentence as it came hot and fresh from the learned writer's fertile mind.

This work cannot fail to meet with hearty welcomes from the elder of the profession, while the young men of medicine will derive countless benefits from its desirable presentation, careful annotation, conscientious handling, and important ethics. Those alone who undertake to be the vehicles of thought from one country to another, can appreciate the dull labor, and sufficiently feel grateful to the doctor for his indefatigable efforts in behalf of therapeutics.

Gourmet.

PHARMACOPŒIA NEERLANDICA.

Rochester, N. Y., Sept. 1861.

Messrs. Editors:—I noticed with pleasure an announcement in your last number of the Medical Reporter, (Sept. 7th,) that the new edition of the United States Pharmacopœia will be ready next year. In connection herewith, I beg leave to call attention to a work of kindred character recently published in Holland, viz: "The Pharmacopœia Neerlandica." Some years ago, the King of the Netherlands appointed a Board for the purpose of improving the Pharmacopœia of that country. The gentlemen chosen, were, A. H. Vander Boon Mesch, G. J. Mulder, C. Mulder, W. H. de Vriese, A. J. d'Ailly, C. Pruys van der Hœven, and G. C. B. Suringar.

After much labor and difficulty, necessarily accompanying so important a work, it was accomplished; and at last to my great delight, this pharmaceutical law book lay before me. It is written in the Latin language as a tribute to the cosmopolitanism of science, like the Pharmacopœia Borussica, which work it resembles in its style and character.

In every case, but one method is prescribed for making preparations; while such subjects as botany, materia medica, therapeia, and pathology, are, as they ought to be in such a work, carefully excluded. It is in reality a literary gem; were I to attempt to note its chemical and pharmaceutical superiority, my pen would utterly fail in the undertaking.

That it is the work of the above-named authors and professors of Utrecht and Leyden Universities, should inspire universal confi-

dence and respect in relation to it. It is published by the Government, and printed in Hague.

Gerard Arink.

ARMY CORRESPONDENCE.

The Speedy Impression of Malaria in a Camp, and Rapidity of Recoveries when Removed from its Influence.

Camp near Rockville, Md.,
Sept. 26th, 1861.

When I last wrote you we were stationed in a low, malarial region near Darnestown. Previously to that time we had been in no country, which physically indicated anything peculiarly unhealthy. Our regiment had suffered very little, the inevitable diarrhœa lasted but a few hours, and then yielded readily. The weather being agreeable and pleasant, catarrhs were rare and of a mild character; in fact, nothing serious had occurred to impair the strength or diminish the ardor of the troops. The location for encamping at Darnestown had been selected carelessly and to suit convenience, from the fact that it was supposed that we would remain a very short time. Different, very different, was the appearance of this place from our other encampments. Here the rich, fertile valleys, reaching as far as the eye could reach, were covered with rank verdure and tangled morasses, plentifully dotted in the low places with stagnant pools, the remains of recent rains, in which frequently lay large masses of rank grass, weeds, and fungous vegetation, thus having all the requisites for the evolution of noxious paludal air as they lay reeking and decomposing in the hot noon-day sun. Such circumstances as these, with the autumnal months, and this period of sun-shine and rain approaching, must have caused much anxiety to the most careless observer. Still more so when it was known that this region had been long famous for the virulence of its miasm.

The second morning after our arrival, our sick-list, which had been, ordinarily, about eight or twelve, increased to twenty-five. Of this number, twenty at least, were suffering from the effects of malaria. As yet, however, there were no cases which had all the characteristics of intermittent fever, they complained of a sense of uneasinsss and languor, of slight rigors and flashes of heat and inability for exertion, but without any regular or well defined paroxysm; nor were the objective symptoms more distinct; the pulse was slightly increased, with the smallest perceptible amount of fever. The eyes were often suffused; the tongue pale and tremulous, but presenting nothing peculiar. True, I have noticed what might have been called the "malarial margin," of Osborne, but this condition is observable in diseases having no connection with this mephitic air.

In the first few days we had many doubtful, irregular—febris intermittens larvata—cases, which were sufficient to put us upon guard and warn us of the approach of a malady, which, though rarely fatal, often entails profound and dangerous sequellæ.

Gradually the cases became more distinctly periodic, presenting the regular pyrectic and apyrectic stages; those cases which at first were vague and doubtful, became well-marked and certain. Thus the number of cases regularly increased, both in number and severity, until it became necessary to apply to the Commanding General for permission to move to another location. Having obtained this, we selected, a few miles distant, a high, level tract, nearly surrounded with pine-land. This change has made a rapid and favorable impression, nearly all the cases of malarial fever have disappeared; in fact all, except those upon whom it was deeply engrafted at Darnstown.

J. W. Lodge.

NEWS AND MISCELLANY.

Dr. D. M. Skinner, of Caldwell, Essex Co., N. J., has received the appointment of Assistant Surgeon in the U. S. Navy.

Mr. J. M. Maisch, pharmaceutist, of this city, has been appointed to the Chair of Materia Medica and Pharmacy in the N. Y. College of Pharmacy.

Mr. F. F. Mayer, also of this city, has been appointed to the Chair of Chemistry in the same College. Both enter upon their duties at the approaching session of that College.

The Faculty of the Polytechnic College of this city has been increased by the appointment of Col. Chas. M. Eaken, formerly instructor at West Point, as Superintendent of Military Instruction, and of Mr. Emile Pollmar, formerly of the Royal School of Mines, Freiberg, Germany, as as assistant in the Schools of Mines and Chemistry.

Dr. Samuel D. Crawford, the Surgeon of Fort Sumter, has been appointed a Major in the regular army. In the bombardment of that fort he commanded a portion of the ordnance, and exhibited great bravery. He is ordered to report to General Rosecranz, in Western Virginia.

Dr. J. C. Eastman is Surgeon, and Dr. S. P. Gauly Assistant Surgeon of the Fourth New Hampshire Regiment.

The Medical Times and Gazette records the death of M. Girardeau de St. Gervais, who was the possessor of two *robs* for curing every syphilitic disorder. By advertising both he created an apparent rivalry and antagonism between the two nostrums, and thus kept up the interest of the public in them. He left a fortune of four million francs.

Stringent Resolutions against Homœopathy, &c.—At a meeting of the Council of the Royal College of Surgeons in Ireland, on Aug. 2d, the following ordinance and resolution were finally adopted:—

"No fellow or licentiate of the College shall pretend or profess to cure diseases by the deception called homœopathy, or the practices called mesmerism, or by any other form of quackery; neither shall they or any of them seek for business through the medium of advertisements, or by any other disreputable method. It is also hereby ordained, that no fellow or licentiate of the college shall consult, meet, advise, direct, or assist any person engaged in such deceptions or practices, or in any system or practice considered derogatory or dishonorable by physicians and surgeons."

The College of Physicians has adopted the following form of declaration to be taken by licentiates on admission:—

"I engage not to practice any system or method (so-called) for the cure or alleviation of disease, of which the College has disapproved; nor to endeavor to obtain practice or to attract public notice by advertising, or by any other unworthy means. I also engage that I will neither permit nor sanction the use of my name by any other person for such purposes, nor in connection with any secret or other remedy; and in case of any doubt relative to the true meaning or application of this engagement, I promise to submit to the judgment of the College. And I solemnly and sincerely declare, that should I violate any of the conditions specified in this declaration, so long as I shall be either a licentiate or fellow of the College, I thereby render myself liable, and shall submit to censure of the College, pecuniary fine (not exceeding twenty pounds), or expulsion and surrendering of the diploma, whichever the President and Fellows of the College, or the majority of them, shall think proper to inflict."—*Dublin Medical Press.*

Quacks a Hundred Years Ago.—If our forefathers a hundred years ago could not boast of their mesmeric influences, or of table-turning, or of spirit-rapping, they were the victims of a marvellous list of quackeries of other descriptions, which were, perhaps, more injurious in their effects. It was literally the age of quack medicines, and every possible disease was fitted with its nostrum, all duly qualified by his Majesty's letters patent. There were "The Original Balsam of Health," otherwise called "The Balsam of Life," which is described as "the most admirable vulnerary in nature;" the "Golden Nervous Cordial, or Paralytic Drops," which was "the greatest preservative and restorer of health ever yet published," and had been "sent many years ago by her Catholic Majesty to King James the First's consort;" the "Famous Sugar-plums for Worms;" the "Grand Elixir of Ease," which was a certain cure for the colic; and "The Much-famed Hypo Drops," which "infallibly cure melancholy in men or vapors in women." One "Doctor Toscano" declares himself able to find out and cure all diseases to which humanity is liable, adding, in conclusion, "I will forfeit one hundred guineas if anybody can prove to the contrary." Some of these medicines are put forward under the name of the celebrated Doctor John Hill, the great medical and literary quack of the age; such as "Essence of Water Dock," a safe remedy for scurvy; and the "Elixir of Baridana," which was infallible against gout and rheumatism. Those who needed the latter were encouraged by the information added to the advertisement, that "The baridana (burdock) is a common innocent British plant." Dr. Hill's "elixir" met with a rival in a medicine against the same diseases, by one Dr. Colley, who announced as "an effectual remedy," his "Antiarthritick Wine," supposing, perhaps, that the very name of wine was enough to cure a gouty patient. But all these inventions are thrown into the shade by the "Medicinal Arabian Quilt," wherein, we are told, "is infused salutary composition," consisting chiefly of "Eastern vegetables," and by "wrapping up in this quilt," sufferers under all sorts of diseases were to find quick relief. We learn from the same advertisement that "the author also has invented a medicinal paper cap, for the constant wear of those who are vaporous, or subject to catch cold;" and of this it is further stated, "likewise it refreshes the memory of the studious, particularly those who apply constantly to their pen, and is so curiously contrived that gentlemen (*sic*) may constantly wear them under their wigs, or even ladies under their caps."—*London Review.*

The Buffalo Medical and Surgical Journal.—The September number of this journal, which is its second issue, has been received, and gives evidence of editorial energy and ability. It presents an interesting leader on Civil and Military Surgery. The profession of that region should give it their support. With such a medical rival as Buffalo at the West end of the State, and the spirited medical institutions of Brooklyn at the East, New York City has to struggle with powerful competitors for a medical position.

Surgeons Returned.—Surgeons Powell, Harris, LeBoutellier, Goodenough, Connoly, McLetcher, Gray, and Wilson, made prisoners at the battle of Bull Run, have been released on parole, and have been sent to Washington, via Norfolk, under a flag of truce. They have had the care of the Federal wounded at Richmond, Va., and bring with them a letter from Lieut. Todd, brother-in-law of President Lincoln, complimenting them in high terms. Surgeon Powell, it will be remembered, was "brutally murdered" while attending to his duty on the battle field—at least so several of our cotemporaries had it—but he would not stay "murdered"

and now turns up safe and sound, to the great delight of his numerous friends.

Dr. Thomas Stewardson, Jr., has been appointed by the District Court to fill the position in the Board of Health of this city, made vacant by the death of Dr. James Bond.

To Correspondents.

Postage Stamps.—Subscribers will please *not* send us the old style of stamps, as they are worthless to us, not being received for postage at the Office in this city. They will also please send us *only one* and *three* cent stamps. tf

B. S.—The Russian or Turkish bath can be taken in perfection at the Natatorium and Physical Institutes in this city. The charges announced are fifteen baths for twelve dollars.

M. W.—We have seen nothing more reported favorable to the anæsthetic properties which were claimed for the vapor of the oil of turpentine. The effect in the case in which the discovery was said to have been made, was probably more physiological than directly anæsthetic.

J. E. P.—The following, which is Sec. 10, of Art. 5, of the Code of Ethics, should have controlled your conduct:

"When a physician who has been engaged to a case of midwifery is absent, and another is sent for, if delivery is accomplished during the attendance of the latter, he is entitled to the fee, but should resign the patient to the practitioner first engaged."

Dr. J. B., N. Y.—We send you the number of the Reporter you desire. Send money by mail; we share the risk.

Dr. G. S. W., Eckley, Pa.—Enclosure received; but $3 48 only, instead of $3 60, as you intended, for the Reporter and "H. B."

Dr. B., Ohio.—We will send you the "H. B." for the additional sum you propose.

Dr. J. W. H., Mass.—You are credited $3 on our books. The additional sum will entitle you to the Reporter to Oct.'62, and "H. B."

Dr. G. W. G, Mass.—The published terms are $3 per annum, or $1 50 for six months, payable in advance. Although we have not sought subscriptions for a shorter period, we have not refused to receive $1 for four months, or even 75 cents for three months, where parties wish to take the Reporter a short time on trial. The latter was probably the case in the instance to which you refer, and if our agent gave a receipt for six months, (which we presume he did not), it was an error. Quacks will get no consolation from the pages of this journal, and if your neighbor continues to take it after his three months have expired, you may have some hopes of him!

Complaints occasionally reach us that the Reporter fails to come to hand. We assure our subscribers that their numbers are regularly mailed, and in such a systematic way that we are quite sure there can be no failure on our part. We must therefore lay the blame upon the mails. When we deposit the numbers in the post office here, the mails must take the responsibility of delivering them as directed. And still, when numbers are not received by our subscribers, we are happy to duplicate them if we have them on hand.

Communications Received

Connecticut.—Dr. C. R. Hart; Drs. J. L. Lyon, A. D. Crabtree, J. C. Jackson, John J. Lyon, R. S. Hamilton, C. F. N. Creed, C. H. Austin, Justus Sherwood, Geo. Blackman, D. S. Burr, J. Jaques, E. Gregory, D. Burritt, each with encl. Dr. N. J. Hall, with encl.; Dr. G. H. Preston, with encl.; Dr. Wm. Bennett, with encl.: Dr. Poll; Dr. Henry S. Dean, with encl. *Delaware.*—Dr. D. W. Maull; Dr. J. D Craig. *Illinois.*—Dr. R. F. Hayes, with encl.; Dr. Jno. Mack; Dr. W. Danforth. *Iowa.*—Dr. M. Marbourg, with encl. *Massachusetts.*—Dr. W. H. Fenton; Dr. C. Cullis, (2); Dr. J. Sargent. Drs. C. C. Field, D. B. Whittier, David Parker, E. E. Spenser, J. B. Gould, Geo. Hoyt, Kendall Davis, F. M. Cracin, James Coolidge, A. G. Wilhams, H. A. Meacham, F. A. Sawyer, J. Sidney, Daniel Horley, H. L. Harding, A. C. Dean, S. D. Seymour, O. O. Roberts, S. A. Fisk, James Dunlap, G. D. Peck, A. W. Thompson, Chas. Blodget, A. Bryan Clark, S. Mires, Wm. Pierson, O. L. B. Stickney, R. Shepherd, H. R. Vaille, W. Fitch, C. A. Belden, Charles Tobin, Edward Flint, each with encl. Dr. M. B. Learned, (all right); Dr. J. Jackson, (all right); Dr. W. F. Teulon; Dr. J. H. O'Kelley; G. N. Thompson; Dr. C. M. Tuttle, with encl.; Dr. Daniel Wilder, (all right); Dr. E. B. Moon, (all right); Dr. E. S. Willard, (all right); Dr. G. W. Garland; Dr. D. A. Johnson, (all right); Dr. J. W. Wakefield, (all right); Drs. G. Atwood, F. Foster, B. F. Green, J. W. Hinckley, (each all right); Dr. B. DeGersdorff, (will write to you). *Maryland.*—Dr. W. S. Forwood, with encl. *Michigan.*—Dr. Jno. Falley; Dr. E. A. Egery; Dr. Lewis Meads, with encl.; Drs. A. J. Sawyer, Ch. T. Southworth, H. W. Lobdell, T. M. Harvey, M. L. Green, H. H. Treadway, each with encl. *New Hampshire.*—H. B. Cross. *New Jersey.*—Dr. R. J. Brumagin, with encl.; W. J. Lyttle, with encl.; H. H. Tichenor; Dr. D. M. Skinner; Dr. J. S. Linaberg, with encl.; Dr. J. F. S. Shoemaker, with encl. *New York.*—Drs. O. C. Gibbs, Gerard Arink, S. C. Pettingill; Dr. J. B. Hayes; Dr. Per Lee Pine, with encl.; Dr. S. E. Parsons; Dr. J. H. Thompson, with encl.; Dr. C. P. Smith, with encl.; Drs. H. W. Wells, J. S. Dolson, A. H. Crittenden, A. DeWolf, each with encl.; Dr. G. H. Sears, with encl.; Dr. J. B. Smith. *Ohio.*—Dr. A. E. Bell; Dr. F. G. Young, with encl.; Dr. C. Woodward; Dr. W. W. Jones, with encl.; Dr. C. C. Hildreth, with encl.; Dr. John Dickinson; Dr. Pearce; Dr. Bonaparte, with encl. *Pennsylvania.*—Dr. R. Armstrang, (book sent); Dr. R. H. Smith, with encl; Dr. S. C. McCormick; Dr. C. C. Edwards; Dr. Thos. Johnson, with encl.; Dr. G. S. Wentz, with encl.; Dr. J. R. Mason, with encl.; Dr. H. Gross, with encl.; Dr. R. A. Moon, with encl.; Drs. J. & D. McCarroll, with encl.; Dr. Happersett. *Rhode Island.*—Dr. R. H. Rice; Dr. H. Batchelder, (all right); Dr. J. D. Thompson; Dr. C. Wiggin, (all right); Dr. M. Y. Simmons, (all right). *Vermont.*—Dr. Fosburgh, with encl.; Dr. A. Kendrick, with encl.; Dr. C. A. S. Sprague, with encl.

Office Payments.—Drs. A. Ruggles, Seip, Smith, Pollock, Winter, Knapp, McAuley, Reed, Groom, Hayes, Chamberlain, Migiod, Crotzer, and Eggleton.

VITAL STATISTICS.

Of Philadelphia, for the week ending Sept. 28, 1861:

Deaths—Males, 111; females, 108; boys, 70; girls, 60—Total, 219. Adults, 89; children, 130. Under two years of age, 66. Natives, 173; Foreign, 33. People of color, 12.

Among the causes of death we notice—Apoplexy, 1; convulsions, 9; croup, 5; cholera infantum, 8; cholera morbus, 1; consumption, 20; diphtheria, 6; diarrhœa and dysentery, 8; dropsy of head, 11; debility, 16; scarlet fever, 15; typhus and typhoid fever, 8; inflammation of brain, 2; of bowels, 3; of lungs, 5; bronchitis, 2; congestion of brain, 6; of lungs, 3; erysipelas, 2; whooping cough, 2; marasmus, 12; small pox, 11.

For week ending September 29, 1860.....206
" " " 28, 1861.....219

Of Boston, for the week ending Sept. 21, 1861:

Deaths—Males 52; females, 38. Total, 90. Under five years years of age, 50. Natives, 71; Foreign, 14.

Among the causes of death we notice—Phthisis, 15; cholera infantum, 11; croup, 0; scarlet fever, 1; pneumonia, 3; variola, 0; dysentery and diarrhœa, 4; typhus and typhoid fever, 3; diphtheria, 0.

Of New York, for the week ending Sept. 23, 1861:

Deaths—Males, 219; females, 165; boys, 135; girls, 100. Total, 374. Under two years, 185. Natives, 262; Foreign, 112.

Among the causes of death we notice—Apoplexy, 5; infantile convulsions, 29; croup, 1; diphtheria, 6; scarlet fever, 8; typhus and typhoid fevers, 13; cholera infantum, 37; cholera morbus, 2; consumption, 52; small pox, 4; dropsy of head, 10; infantile marasmus, 39; diarrhœa and dysentery, 28; inflammation of brain, 10; of bowels, 10; of lungs, 10; bronchitis, 3; congestion of brain, 6; of lungs, 1; erysipelas, 0; whooping cough, 4; measles, 3. 208 deaths occurred from acute disease, and 22 from violent causes.

Of Brooklyn.—The total number of deaths in that city last week was 127. The principal diseases were—Consumption, 16; cholera infantum, 11; marasmus, infantile, 11; convulsions, 7; diphtheria, 5, etc. Adults, 50; children, 67, of which 31 were under one year of age. Natives of the United States, 91; Ireland, 27; all other countries, 9.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 260. PHILADELPHIA, OCTOBER 12, 1861. NEW SERIES, VOL. VII. NO. 2.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

By a Hospital Surgeon of Philadelphia.

(*Continued from page* 572.)

GUN-SHOT INJURIES OF THE HUMERUS.

These are to be divided into injuries of the shaft and of the articulating ends; those of the shoulder-joint are not rare, occurring from the head of the humerus being struck by bullets from before, from outwards or from behind, and also from inwards, the last penetrating near the coracoid process, and traversing the axilla; the brachial vessels and nerves usually escape, but this is not always the case, as in the report of the surgeons in charge of the wounded at "Bull Run," it stated that of the wounded of the First Minnesota (at Richmond) Regiment, Company F, Sergeant Harris, a musket-ball passed through the left shoulder, which was followed by almost complete paralysis of the arm; while five cases of musket-balls through the shoulder are all stated to have recovered but one; this last one no result is stated.* Bullets, according to Dr. Stromeyer, grazing the shoulder-joint often traverse a portion of the deltoid without opening the joint. Whether the articulation is opened or not, cannot always be determined by an examination of the wound, but is ultimately determined in the course of the case by inflammation arising in the joint. He states that this uncertainty in the diagnosis is of no great importance, as in either case antiphlogistic treatment must be employed, and injury of the capsular ligament calls for no special treatment. With care, the cure takes place by anchylosis after long-continued suppuration; but should the last prove dangerous to life, resection of the head of the humerus is to be performed. Extensive comminution of the head of the humerus does not necessarily demand resection, as a cure can occur by anchylosis, after the fragments loosened by suppuration are discharged; as, however, with the help of resection, the mobility of the arm can be preserved, it is preferable to undertake this operation at once, or after suppuration has been fully established. Dr. Stromeyer states that those cases are the most difficult when the shoulder-joint has been injured internally and inferiorly by a bullet entering in the axilla. Everything here depends upon deciding, in the fresh state of the wound, as to the extent of injury to the bone. A case occurred where the medical man in attendance supposed that injury of the ribs existed, and where, on the autopsy, it was found that the anterior costa of the scapula was split off, including a portion of the glenoid cavity, and that the head of the humerus was grazed. In this case, hemorrhage took place about the twelfth day, the subclavian was taken up, the bleeding recurred, and the patient died. Had the piece of the scapula been removed in the first instance, after the resection of the shoulder-joint, the case would have probably proved favorable. Resection of the entire body of the scapula has been performed with success in this country and in Europe. One of the most complete and interesting cases, occurring in this country, is given in the Reporter for Sept. 21, by an ingenious and skillful surgeon, Dr. A. G. Walter, of Pittsburgh, Pa. Such cases are highly creditable to the humane and accomplished surgeons of the present century.

* It is very gratifying to find our enemies testifying to the devotion of our surgeons, by night and day, to the sick and wounded.

If resection of the humerus is performed in the ordinary way, by an incision between the two tubercles of the head, it is not difficult of execution—the long tendon of the biceps is readily drawn aside by means of a hook, and the operation then proceeded with; but, after this operation, the secretion from the wound does not readily escape. Stromeyer, therefore, intro- a new method in which the articulation is opened posteriorly by a crescent-shaped incision, commencing beneath the acromion, and proceeding backwards and downwards. Thus the secretions escaped with facility as the patient lay, and the success fully justified the expectations. Burrowing of matter did not take place, and the patients overtook, in their recovery, others who had been operated on months previously. He, therefore, considers it proper to recommend this innovation urgently to the notice of surgeons.

Gun-shot Injuries of the Elbow-Joint.—Gun-shot wounds of the elbow-joint are considered, in general, more dangerous than those of the shoulder-joint. This opinion was held by Larry, who writes, in his "Clinical Surrgery," the "rending of the fibrous and nervous structures of this joint is serious, and always demands amputation of the limb. I know of no instance of a cure where this limb was seriously injured by a ball."* This same opinion was held by Guthrie in his work on Gun-shot Wounds of the Extremities: "Wounds of the elbow-joint by balls, even when only one of the bones forming it is injured, seldom result favorably; commonly they indicate, at a later period, the necessity of amputation, on account of destruction of the cartilage, after the hope of anchylosis of the joint has proved vain."

By the great number of failures to save the limb under these circumstances, I am thoroughly convinced that such cases are only rare exceptions in military practice. Yet, in certain particular cases, and under favorable conditions, this same surgeon recommends resection of this joint instead of amputations of the arm, yet he never undertook such an operation. It was reserved for "Nangenbeck and Stromeyer" to introduce this important improvement into military surgery, for, according to the statement of Dr. Frederick Esmarch,† this operation was not performed previous to 1848–9, either in Paris, Italy, Baden, or Hungary.

The same authority observes, that "on comparing, statistically, the results of resection of the elbow-joint with those of amputation of the arm, "it can no longer be doubted which of the two is preferable. Out of 54 cases of amputation of the arm 19 died; out of 40 resected at the elbow-joint only 6 died."

In the Crimea, 153 arms were amputated, and of these 29 died; 17 elbow-joints were excised, with 2 fatal cases. In all these we have 207 cases of amputation, with a mortality of 48, or about 23 per cent. Of the resections we have 57 cases, with 8 deaths, or 14 per cent. Thus, then, in comparing amputation of the upper part of the arm with resection of the elbow-joint, we obtain a per centage of 9 in favor of the latter operation.

According to the carefully prepared statistics of Dr. Heyfelder,* a distinguished surgeon of St. Petersburg, he states, concerning the resections of the upper extremities, we find 288 cases of resection of the elbow-joint, (32 deaths, 220 cures, 6 doubtful, 17 partially successful, and 13 failures.)

He has in this work brought together the whole of our present experience on resections collected from the literature of all countries, and altogether he has collected 2,662 resections which have been made, the results are known of 2,241 cases; there have been 452 deaths, and 1,616 complete cures; in 1,789 cases the life has been saved; 173 cases have been unsuccessful, and of 421 the result is not known.

The healing of the wound after resection of the elbow-joint is, indeed, usually more tedious than after amputation, but the patient retains his limb.

How much of the comminuted bone may be taken away, and in what extent of comminution it can be fairly attempted to preserve the limb by resection?

"Guthrie" would only resect, where the lower end of the humerus alone, or where the upper joint-ends of the ulna and radius are together injured.

"Bandens" is of the opinion that resection should only be performed where one alone of the three joint-ends is injured. Yet, in truth, neither of these authorities speak from experience, while "Esmarch" has performed this operation, where not only one or two, but all

* However, the father of French Surgery, Ambrose Pare, has recorded two excellent cases of healing after wounds of this kind.

† Esmarch on Resection of Gun-shot Injuries, p. 79. Kiel, Charl, Scroder & Co., 1851. Translated by S. F. Statham.

* The Operative Proceeding in and Statistics of Resection, by Dr. Heyfelder. Wien, 1861.

three bones of the elbow-joint have been injured. He has removed from their surrounding soft parts, four to five inches in length, both from the humerus, ulna and radius, when these portions had been struck off by the bullet. In another case, where resection of the shaft of the humerus in its lower third had been commenced, the elbow not being supposed to be injured, such a considerable extent of injury was found, that the epiphysis of the humerus was also removed. This case proceeded as favorably as the others, and, after the arm had become much shortened, it healed with almost complete anchylosis, although in all a piece of four inches in length, of the entire volume of the humerus, had been removed.

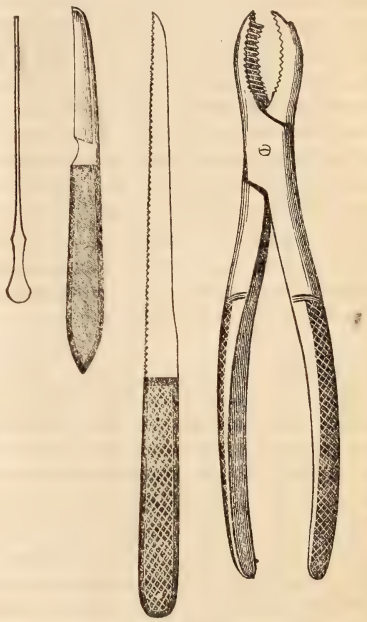
Method of Operating.—Esmarch states that he has tried very many different methods, but in his last campaign, he, and his associates, operated solely on Liston's method, with certain modifications, which partly rendered it essentially more easy of performance, partly was necessitated by the varying extent of the injury to bone.

All methods in which osteotomes, chain-saws, and other complicated instruments are necessary, are, of course, not to be used in *war*. The following set of instruments (fig. 1) are recommended by W. T. Statham, the translator of Dr. Stromeyer's work, who was in service at the termination of the last Schleswig-Holstein campaign, and who has employed them in several cases of resection, but he differs from the author by treating the patient with tonics throughout, at the same time the inflammation is treated antiphlogistically. He also objects to Dr. Stromeyer's operation for "resection of the shoulder-joint, as the transverse incision is very apt to gap, and that, even to the extent of three inches, so that, of course, in such cases the sutures are of no use, or serrate the skin."

As many of our young army surgeons have never practiced the operation of resection of the elbow-joint, we will give the details and after treatment for their benefit:*

To resect the elbow-joint quickly, and with the simplest instruments, it is first requisite to lay open the whole joint so freely that the ends of the bones can be easily thrust out of the wound. This is only possible by opening the joint on the posterior surface, as there is here no other important vessel or nerve, except the ulnar nerve. Earlier operators have at once divided this nerve; and doubtless, in many cases, reunion with restoration of function has taken place. As this can, however, be easily avoided, it is absolute requisite, for performing this operation in a scientific manner, to preserve this nerve, unless indeed the internal condyle of the humerus is comminuted, and the nerve torn across at the same time.

Fig. 1.



Steel Probe (not too much hardened) for examining if the bone is softened.

Blunt pointed Knife (Langenbeck's) for deep operations on bones. The blade is continued down the handle. The edge should be soft rather than hard.

Saw for division of any long bone, without thoroughly exposing it, (Langenbeck's.)

Resection Forceps altered from gas-fitter pincers, (Statham's.)

The above instruments can be had of Mr. Kolbe of this city.

For this operation the patient was laid on his back, on a table covered by a mattress, with the posterior surface of the wounded arm turned to the light, and lying on a long cushion covered with oil-cloth. If the patient lays prone, the operation is certainly easier, but we preferred the method described on account of its being less dangerous to administer chloroform. An able assistant held the arm, a second is required to move the fore-arm according to the wishes of the operator. As soon as the patient was under the influence of chloroform, an incision, three inches in length, was made on the outer side of the ulnar nerve, to divide the skin and subcutaneous cellular tissue. This incision must begin just above the point of the olecranon on the inner side of the tendon of the triceps, proceed along the inner edge of the olecranon—and below the same, corresponding to the direction of the crista ulnæ, be carried a little more outwardly. The second incision is carried from

* Dr. Friedrick Esmarch on Resection in Gun-shot Injuries: Translation of S. F. Statham. London, 1860, pp. 82-87.

over the humeroradial joint transversely over the olecranon into the middle of the first—meeting it at a right angle. Earlier operators have now opened the sheath of the ulnar, and drawn it to the inner side by means of a blunt-hook. The operation is thus much easier and even a less practised surgeon does not run the danger of wounding the nerve. The Surgeon in Chief, Dr. Stromeyer, in general therefore recommended this method to younger surgeons performing the operation for the first time. The nerve is thus, however, injured. If the operation is performed with suitable care, this nerve is not at all seen—by adopting the following procedure.

After the incisions in the skin, the fore-arm is somewhat flexed, and the capsule of the joint opened at once on the inner side of the olecranon. The edge of the capsule is now either seized by hooked forceps, or the edge of the wound is drawn by the left thumb sufficiently inwards, for its nail to stretch the incised portion of the capsule. Repeated incisions are now carried along the inner border of the olecranon direct upon the internal condyle, by which the soft parts are entirely separated from the bone. These incisions must follow one another at the most at the distance of half a line, and the edge of the knife must always cut on the bone; for by this means only can the periosteum, covering the inner condyle be left in connection with the capsule, and all the soft parts above it be dissected back without injury.

The knife is generally blunted during this stage of the operation, but when this is ended, the greatest difficulty is overcome. This method is especially necessary in all resections, if the periosteum is to be preserved and the soft parts injured as little as possible. As the exposure of the inner condyle is the point to be affected by any one wishing to become master of the operation, its practise on the dead body is especially to be recommended to every surgeon.

When the internal condyle, which often projects very far, is laid bare to its point, the soft parts are to be drawn away by the left thumb, and the periosteum from it as before described for the olecranon. After this, the position of the ulnar nerve may be recognized by a prolonged swelling on the inner side of the soft parts turned back from the condyle; but the sheath of the nerve itself cannot be seen, as it is covered by a portion of the capsule, of periosteum, and by a thin layer of cellular tissue.

The third stage of the operation is now proceeded with—that is, the complete opening of the joint. The internal lateral ligament, already laid bare, is first divided in its middle. The arm being then much flexed the tendon of the triceps is freed by the knife from the olecranon, and the incision prolonged outwards and downwards to the head of the radius, so as to divide the anconeus from the ulna and also to open the capsule in this position. By means of a transverse incision, the external lateral—and the radial annular—ligaments are divided, and the head of the radius exposed. The whole joint now gapes widely on strong flexion of the fore-arm so as to touch the arm—and then by taking hold of the olecranon and drawing it from the humerus, one is generally at once able to divide the anterior portion of the capsule with the knife. If the joint-ends do not yet separate sufficiently, it depends upon the lateral ligaments not having been fully severed; the portion in fault, whether internal or external, must be sought for by the fore-finger, and at once divided by the knife. If a large portion of the ulna is to be removed, the attachment of the brachialis anticus must be separated from the coronoid process, taking care not to wound the brachial artery; we have often used Langenbeck's blunt-pointed knife for this portion of the operation—if care is taken to cut only against the bone, a pointed knife is equally serviceable for the durpose.

The joint-ends of the three bones can now be thrust far enough out of the wound so as to be removed by an ordinary amputating saw. In cases, where there was but a slight injury to bone, as for example, when only the olecranon was comminuted, or the joint-surface of the humerus grazed, we sawed off the head of the radius, the epiphysis of the ulna close below the coronoid process, and the whole end of the humerus covered by cartilage. If it was necessary to take off a larger piece from one bone, so much less was removed from the others. If, for example, the lower end of the humerus was comminuted to such an extent, that, after removal of the splinters and truncation of the sharp points, three to four inches were found to be lost—we left the ulna and radius untouched; if the loss of substance was less, the olecranon, or only the upper half of the same was sawn off, as its projection, against the end of the resected humerus, easily induces pain and increases the probability of anchylosis. If we were obliged to resect large portions of the ulna and radius, we left the end of the humerus similarly untouched.

At first we occasionally attempted to remove the cartilage with a knife; this is troublesome, however, and wastes time and cannot be effected completely, moreover, as it appeared to have no influence on the further course of the case, we did not do so latterly. The cartilage softened soon after the occurrence of suppuration, and freeing itself in larger or smaller pieces, came away with the pus from the wound.

Esmarch has already mentioned that in the year 1850, we only resected the elbow-joint after Liston's method. In the campaign of 1849, Dr. Stromeyer at first resected after Jaeger's manner, as being the easiest to show to the younger surgeons; this consists in H-formed incisions, the two flaps of which are dissected back. After the sheath of the ulnar nerve was opened, this was drawn to the side and the operation then proceeded with, as al-

ready described. In three cases we added another incision to Liston's ⊣-formed one, by making a short one parallel to the longiditunal one, commencing above the humeroradial joint and carried either upwards or downwards. This was done according as the humerus or ulna were comminuted. The wound thus became ⊢⊣-shaped, and the removal of a large piece of bone was much facilitated. By this mean's Liston's method of incising the skin sufficed for all cases, and the method already described was later always employed, viz: in twenty-seven cases.

The Surgeon-in-Chief, Dr. Langenbeck, preferred to make a single longitudinal incision, three inches in length, on the inner side of the olecranon, corresponding to the course of the ulnar, and the method of dissecting back this nerve from the internal condyle was first taught by him. If the soft parts are not yet much swollen, the ends of the bones may be easily thrust out from such an incision. As soon, however, as a considerable serous or inflammatory infiltration has come on, as generally occurs after gun-shot injuries, it is necessary to lengthen the incision too much, to prevent tearing or brasing the skin. This method was employed three times.

In a case where the lower end of the humerus was comminuted, Dr. Stromeyer made a semicircular incision, the convexity downwards, in the same way as is given by Guepratte. This method has no special advantage and the exposure of the internal condyle becomes somewhat more difficult.

If the ulna is struck below the joint and the splintering extends into the same, and to to such an extent that it is unnecessary to remove any portion of the humerus—it is not requisite to expose the internal condyle. In such cases the joint may be opened outside the olecranon, and the fragments be dissected out one after the other. The internal lateral ligament may be divided from the joint-cavity—merely taking care to avoid the ulnar nerve. Similarly all the soft parts over the epiphysis of the humerus are as little as possible to be meddled with.

If the resection is undertaken sometime after the reception of the wound, the hemorrhage is at first free, as the smaller arteries of the skin and cellular tissue are much enlarged by the inflammation. However, we never compressed the brachial artery, as the bleeding could only be of service to the patient, and, besides, would generally cease during the operation.

After completion of the operation, the centre of the longitudinal incision was usually left open for the escape of matter, and the remainder of the wound united by interrupted sutures. We have not seldom seen a partial union of the wound follow by first intention.

If, however, one or both gun-shot wounds were on the posterior surface of the elbow, we at once changed the direction of the incisions so that they should run through the openings, and then left this portion of the wound open, as we could not expect that the contused borders would heal by the first intention.

After-Treatment..—Stromeyer was certainly right in considering the quiet and comfortable position of the arm as one of the most important points of the whole after-treatment. By his direction the arm was laid at once, after the operation, on a smooth wooden splint. padded with wool and covered by oil-cloth, This reached from the upper third of the arm to the finger-ends, and, at the elbow, was in an obtuse angle of 140 degrees. A hole, the size of a crown, was cut in the splint to allow the internal condyle of the humerus, if left, to be protected from injury. This splint lay near the patient on a large chaff cushion, the arm was laid prone upon it, and kept in position by some turns of a roller above and below. The wound was dressed at first with cold, afterwards with warm water, when the suppuration diminished; charpie, dipped in ordinary oil, was applied.

Stromeyer laid great stress upon the arm never being raised from the splint during this treatment. The charpie was laid around the wound sufficiently to take up the secretions from it, and, if care is taken for this object, the arm can be kept thoroughly clean. It is only necessary to dry the under surface of the arm from pus, by small masses of charpie or sponge, by means of the spatula and forceps.

If purulent deposits form deeply, their contents must not be emptied by pressure towards the wound, as the evil is thus increased; but poultices and early incisions must be employed in suitable spots, so as to allow free issue of the matter. If the arm becomes œdematous, bandages are of great service, of course, however, many short pieces, of a foot to a foot and a-half long, must be employed, so that the arm shall never be raised from the splint. It is only when the wound is filled with granulations, and cicatrization has already commenced—that the arm may be carefully raised from the splint, and a roller be employed; a flannel one is best for this state of the arm. At this time, also, warm baths for the whole arm are of great service; by this means, especially, the freedom of motion of the arm and fingers is greatly aided.

The effect of movement in the production of false joints after fracture is well known; it is in the same way of great importance to institute passive motion of the elbow sufficiently early, in order to insure the usefulness of the arm. It may be commenced with care before the wound is fully cicatrized, but, as soon as irritation is caused and the granulations acquire a worse appearance—it must be omitted or very severe inflammatory symptoms or hemorrhage will easily occur.

If all the wounds are fully cicatrized, the patient must make up his mind to bend, extend and rotate the arm frequently by means of the

sound one, and the surgeon himself must perform the same passive motions of the arm whenever he makes his visit, or cause it to be done by an assistant or by another patient. As this practice is painful, the patient readily omits it, even when directed to do so. I believe it is to this circumstance chiefly that must be ascribed, the more or less anchylosed joints that frequently occurred. As, in war-time, the surgeon who first attended the case, easily looses sight of it, often before the wounds are fully cicatrized, by the patient being transferred to a distant hospital, where the surgeon is not so attentive in insuring motion of the joint as the operator himself, who wishes that as good a result as possible may be obtained from his operation.

The great importance of proper after-treatment, as regards the later usefulness of the limb, was decidedly shown in patients resected in the elbow by us at Schleswig, after the battle of Idstedt, and who later were treated in the Danish hospital. The Danish surgeons have not, to my knowledge, performed this operation, and the majority of them, therefore, were not likely to know the value of passive motion in such cases. Hence, it happened, that when these patients returned from captivity, in the beginning of 1851, most of them had their arms in a very bad condition, and in part possessing neither motion nor proper sensibility. These evils could be partially bettered by means of warm baths and methodical passive motion. Yet the mobility of the arms of those patients resected after the storming of Friedrichstadt—that is, almost two and a-half months later than the others—had advanced much farther at the time of the return of the former.

As the mobility of the fore-arm after the operation does not wholly depend upon the size of the portions of bone removed, it will be understood that the joints, in some patients, from whom portions of considerable extent had been taken away, nevertheless resulted in anchylosis, while great freedom of motion existed in others from whom but small portions had been removed. On the whole, it is preferable to take away more rather then less, as the probability of later mobility is thereby increased. In general, therefore, we removed the cartilaginous extremities of all the bones, even if but one of them had been slightly injured.

The greater number of patients with anchylosis of the joints, did not have the arm at a right angle, but at an obtuse angle of 130 to 140 degrees. This is because this position is the only comfortable one for the patient while in bed. We have frequently observed that, when the fore-arm was more flexed, the patients complained of excessive pain, which only ceased on the arm being more extended.

Menstruation: Its Condition in Pulmonary Tuberculosis.

By A. P. Dutcher, M.D.,
Of Enon Valley, Lawrence County, Pa.

PART FIRST.

Menstruation is a term derived from the Latin word which signifies *month;* and in every woman, when healthily performed, it occurs monthly, and is an evidence of her ability to bear children. As a great physiological process, it may be said to divide the life of woman into three periods. The first is that of infancy and youth, and exists, in the generality of cases, from birth till the fourteeth or fifteenth year. The second comprises the most important period of her life—that in which she is capable of becoming a mother. This usually ceases at her fortieth or forty-fifth year. This period is commonly called the change of life. The third is the remaining period of her life. But cases are constantly presenting themselves, to every physician of extensive practice, in which the menses make their appearance as early as twelve or thirteen, and its appearance is sometimes delayed till the seventeenth, and even twentieth year.

The following table is from Dr. Lee's Work on the Diseases of Females, and is an exhibit of the time of its appearance as noticed in seventeen hundred and eighty-one women of England and France:

In 1781 *women, it occurred,*

At 11 years, in .	110	At 16 years, in .	284
12 " .	144	" 18 " .	144
13 " .	356	" 19 " .	72
14 " .	366	" 20 " .	40

These observations coincide with some tables that have been made in this country, on a less extensive scale, and although cases have been reported of discharges very much resembling menstruation occurring in extreme infancy, there is no proof that such discharges are identical with it. They depend, for the most part, upon ordinary congestion of the uterus, in the same manner, and for similar causes, that may produce congestion of the lungs, and consequent hemorrhage in infants and adults. A mother came to my office with her little daughter, aged eight years, very much alarmed, stating that she believed her child was menstruating, she had been in the same condition four weeks before. A careful examination of the case proved the existence of hæmaturia.

Various causes may contribute to the early or late appearance of the menses, such as climate, constitutional temperament and habits of life.

Thus, authors tell us that, in the south of India, and other hot countries, girls begin to menstruate at eight, nine, and ten years of age; but, advancing to the Northern climates, there is a gradual protraction of the time, till we arrive at the extreme North, where women do not menstruate till they arrive at mature age, and then in small quantities at longer intervals, and sometimes only in summer. And it is also said, that when they do not menstruate according to the genius of the country, they suffer equal inconvenience as in warm climates, where the quantity discharged is much greater, and the periods shorter.

I have, for several years, observed that the menses appear much earlier in females of the nervo-sanguineous temperament than those of the other temperaments. Persons thus constituted have an exuberance of the vital forces; hence all the physiological changes are accomplished more speedily—indeed, all here is life and activity, there is no dullness or inactivity, either of mind or body; all things are in the spring time to it, and the young miss is sometimes the mother at *fifteen*. An instance of this kind recently came under my notice. She had an easy labor, the child was of average size, and at the present time is doing well. The mother of this patient informed me that she changed regular at the age of twelve. For her age she was an individual of precocious mind, and of very beautiful physical developement—a perfect Venus.

Certain habits of life will likewise accelerate its appearance; and among them there may be enumerated the premature cultivation of the passions by the perusal of obscene romances, the inspection of lascivious pictures, the theatre, and the ball-room; the bad example of premature libertinism, of which too many examples are unfortunately furnished in great cities. These specimens of premature puberty, the miserable consequences of too great vivacity of the passions, are sometimes met with as early as the tenth year.

"In this city," says a distinguished physician of New York, "I have known several instances of menstruation at the tenth and eleventh years, and in all the instances that have passed under my observation, the children were born of parents who had exhausted the powers of life by too severely taxing the nervous system in the pursuit of pleasure. One instance in particular, was that of a scrofulous child, with curvature of the spine. In this case, a tender but unwise mother, contrary to our often-urged entreaties, persisted in feeding the child with highly spiced food, tea, and coffee, bathing it in excessively warm water, and putting it to rest upon a down bed. The consequence was the appearance of the menses at the eleventh year, and death at the sixteenth. Tonics, sea-air, and every aid that wealth could offer, availed nothing, and the poor girl died from pulmonary tuberculosis."*

When menstruation is properly performed, when it occurs at the proper age, that is to say, between the fifteenth and sixteenth year, the individual may be regarded as most fortunate. "A premature eruption of the menses," says Dr. Meigs, "is always to be deprecated, because it is the evidence of a precipitate development of certain parts or structures, while others, not less important in the same category, are delayed and incomplete. The individual who passes at a usual and healthy rate through all the stages of growth and development, from infancy up to maturity, is most likely to enjoy a healthy and happy life, free from weakness, pain, and the danger of premature death. Death loves a shining mark, it is said, and those children, whose youth astonish us by the early perfection of their structures or their intellectual forces, are snatched soonest from the world, as the earliest blossoms are ever most exposed to the chilling frosts of spring." †

PART SECOND.

In pulmonary tuberculosis, the menses are almost always suppressed; and the reason for this is very obvious. Phthisis being a constitutional disorder, wherein the life-forces are enfeebled by a failure in some of the blood-making organs, the uterine functions cease for the want of proper nutriment, and not from local disease. Hence we frequently see young women lose their menses without any visible cause, when all at once symptoms of phthisis will present themselves, and the case will proceed to a hasty termination. But in some cases they are not suppressed at the commencement of the disease; they may be irregular, scanty, and may occur every ten or fifteen days; but, as the disorder advances to the latter stage,

* "Woman and her Diseases," by E. H. Dixon, M.D.
† Meigs' "Woman and her Diseases," page 396.

they are always suppressed. I cannot now remember but two instances where it continued regular until the last. These were exceptional cases, and occurred in patients who were nearly forty years of age.

My experience leads me to the belief, that the menses are more generally suppressed at the commencement of this disease, in very young women, than those who are more advanced in life. M. Louis found that, the duration of phthisis was less than one year, the average period of the menstrual suppression was about the middle of its progress. When the tuberculous affection was prolonged from one to three years, the suppression occurred during the last third. Thus in a young woman, in whom the disease lasted three years, the menses ceased at the end of the thirteenth month; while another individual of the same age, and in whom the disease was similar, continued to menstruate to within two months of the fatal period.

The sudden suppression of the menses in an individual who has an hereditary proclivity to pulmonary tuberculosis, should be looked upon as a very suspicious circumstance, particularly if she be unmarried. A young women ceases to have her regular menstrual discharge, she becomes pale and feeble; she has pain in her head, loins, and limbs—after a certain time she emaciates; her friends become alarmed and call in a physician. He gives her case a very superficial examination, and refers all her difficulties to a cessation of the menses. Remedies are prescribed with a view of restoring them, but, alas! they are without effect, and the medical attendant is suddenly aroused to the sad conviction that he has made a mistake in his diagnosis—phthisis, with all its formidable features, is staring him in the face.

It was for a long time the opinion of writers on pulmonary tuberculosis, and Dr. Lawson, in his recent work on this subject, does not discard the idea, that the disorder, arising from the menstrual suppression, might lead to the deposit of tubercular matter in the lungs. We do not consider the suppression of the menses in any way a cause of the malady in question. In this case they cease from a failure of the vital forces, as already remarked, and it is a very marked symptom of the great constitutional disorder, which is ultimately to result in the dissolution of the entire fabric.

But females are so liable to suppression of the menses from other causes, and its condition is so variable in the early stages of phthisis, that, as a symptom of the disease, it should be taken with some caution. And I have long since come to the conclusion that, when pulmonary tuberculosis has made any considerable progress, all active efforts to restore it by the use of emmenagogues are altogether out of place, and that they are productive of injury; that they stand in the way of other medical agents that are calculated to overcome the constitutional malady, and thereby restore the uterine functions.

The utility of this course can be attested by every physician who is in the habit of treating very many patients of this description. Here is one case out of several that we could cite:

Aug. 5, 1859. Called this day to see Miss —, aged 19; has not been well for three months; has a slight cough on rising in the morning, with mucous expectoration; pulse 96; respiration 25; has fever in the latter part of the day; spirits hopeful; appetite not good; menses suppressed for four periods; bowels costive; very restless at night, with pain in the small of the back and limbs. Thompson's gingival present on the gums of the lower jaw; urine scanty and very high colored; had slight hæmoptysis four weeks since; has no hereditary title to phthisis. Menses made their appearance at fifteen, and have been very regular up to the time of their suppression, and knows no cause for their disappearance. Her habits are very retiring, and for several months has taken but very little exercise.

The physical signs are very marked; inequality in the expansions of the two sides of the chest; perceptible dullness on percussion at the right inferior clavicular region, and, on auscultation in the same region, the prolonged expiratory murmur is very audible. On the left side, the sounds are normal, with the exception of a little increased resonance.

The case was set down as one of limited tubercular deposits in the superior lobe of the right lung; and the following treatment was instituted. Counter irritation to the region affected, with one of the following pills three times a day, two hours after eating:

℞.—Sulph. quinia.
Bromid potass, āā grs. xxx.
Ext. scutellaria lata. ʒ j. M.
Divide into thirty pills.

Sept. 1. Patient very much improved; continued pills, with the addition of a tablespoonful of cod-liver oil, three times a day.

Oct. 1. Still improving; had a slight men-

strual discharge three days since; treatment continued.

Nov. 1. Patient is quite well; is able to ride several miles a day on horseback; has gained in weight fifteen pounds. From this period up to the present time, her menses have been very regular, and her general health very good. There is, however, still some dullness, on percussion, just under the clavicle, and, on auscultation, the respiratory murmur is not as clear and distinct as it should be over the entire superior lobe. The tubercular disease has probably been arrested by the correction of the constitutional vice, and the transformation of the tubercular deposits into cretacarious matter.

The regular recurrence of the menses in phthisis, after they have been suppressed for some time, is a good indication. I have the notes of several cases, where its appearance was almost the first symptom of amendment. I have the history of one case in particular, which I cannot refrain from presenting to the reader:

The patient was a young woman, aged eighteen, the only daughter of a widowed mother. I found her in the cottage of loneliness and poverty; she had toiled hard to support herself and mother; had endured numerous privations, and lived on very scanty fare. At the time of my visit, she had been ill for six months. Her general symptoms were all indicative of phthisis; her eye had an unearthly brightness, and her cheek the brilliant flush of hectic. She was also very much emaciated, and was very weak—could not sit up more than an hour in the course of the day. Her appetite was good, and her bowels regular; has never had diarrhœa or hæmoptysis; the menses have been suppressed from the beginning. The physical signs pointed out the existence of a considerable cavity in the superior lobe of the left lung. The right lung was free from disease.

From these symptoms and signs, he regarded her case as well nigh hopeless. There were, however, three things that inspired us to make an effort to restore her to health: the absence of Thompson's gingival margin, the limited extent of the local lesion, and the integrity of the stomach and bowels. So far as I could discover, there was but a single suppurating cavity in the lobe affected, without any further signs of tubercular deposits. Cases of this kind will more frequently recover than those where the deposits are much smaller, but more universally distributed throughout the pulmonary tissues. And I have sometimes seen instances where a large cavity appeared to act as a kind of preventive to the further extension of the tubercular disease, and the individual would live much longer than where they were more numerous, and extended to both lungs.

This patient was treated to iodine, iron, cod-liver oil, brandy, and a very nutricious diet, just as they could be tolerated, for the space of three months. Her menses appeared very slightly at the fourth week; more abundant at the eighth, and at three months more nearly normal in quality and quantity. From the eighth week her improvement was very marked. The expression of her countenance became more natural; her pulse and respiration less frequent; cough not so troublesome, and expectoration very moderate in amount. The cavity was about nine months in healing. This case occurred three years since—the patient has enjoyed a fair amount of health ever since. The only marks of the disease left are hurried respiration and slight flattening of the superior part of the left chest.

There are some practitioners who are in the habit of considering the lungs perfectly safe so long as a woman menstruates regularly. They regard phthisis and menstruation as incompatible; but this is a delusion, for some individuals will menstruate and give birth to robust children until the very last. And it is sometimes astonishing with what perfection the womb will perform its appropriate functions, even when the lungs are so impeded in their action by tubercular disease that they can hardly supply the system with oxygen sufficient to support animal life. Yet the fœtus will thrive in utero, and, to use the language of Dr. C. Meigs, "issuing into the world redolent of life, and escaping, as it were, from the sepulchral cavity of its dying mother's womb."

—o—

The True Physician.—To the true physician there is an inexpressible sanctity in the sick-chamber. At its threshold, the more human passions quit their hold on his heart. Love there would be profanation. Even the grief permitted to others he must put aside. He must enter that room—a calm intelligence. He is disabled for his mission if he suffer aught to obscure the keen quiet glance of his science. Age or youth, beauty or deformity, innocence or guilt, merge their distinctions in one common attribute—human suffering appealing to human skill. Woe to the households in which the trusted healer feels not on his conscience the solemn obligations of his glorious art.—*Sir E. B. Lytton, in "A Strange Story."*

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

Service of Dr. J. F. Meigs.

Saturday, October 5, 1861.

TWO CASES OF ALBUMINURIA.

Case 1.—The first case was that of a man, fifty years of age, a wharfinger, much exposed to wet and cold. He was admitted to the Hospital on the 28th of August. Some months previous to his admission, he had a swelling of abdomen and scrotum, which in a short time disappeared. In his earlier days he was a hard drinker, but for twenty-five years had left it off. On the first of August he worked in the water, and was much exposed—got thoroughly wetted through. In a few days the swelling of abdomen and scrotum returned, and on his admission both were enormously swollen, the effusion extending down his thighs. He had also pain in the region of his kidneys on moving, for which cups were ordered. He was then placed upon the following treatment, which has been continued with marked benefit, as you see, to the present time. He was ordered to take ten drops of tincture of the muriate of iron, and five grains of gallic acid three times a day. On the 9th of September he voided five pints of urine, specific gravity 1019; on the 16th three pints, and for the last fourteen hours has passed two quarts. Thus, you observe, the urine to be lessened in quantity, and then largely increased, the treatment continuing the same. His urine has the whitish tint of albuminuria. A test of it, soon after his admission, gave the deposite of albumen from the addition of only a drop or two of nitric acid; now it requires considerably more to produce the same result, showing a marked change for the better in his case in this respect. The test by heat gives the same result. When he entered the hospital his abdomen was hard, tense, measuring 42, 43, and now 41 inches in circumference; his thighs were also hard, and exhibited that peculiar clear appearance generally found in this disease; now there is fluctuation plainly discoverable; the abdomen is soft and pliable, the thighs less tense, and the scrotum much lessened in size. His appetite is improving, his tongue is clean, his bowels, at first costive, are now regular, under the administration of cream of tartar. The lower portion of his chest is dull upon percussion, but the dullness changing with change of position, showing that the cause which produces it is a moveable one. He is allowed good nourishing diet, and, under the exhibition of the remedies before mentioned, he is improving.

Case 2. The second case was a lady, a washwoman, forty-two years of age; had this disease twice before; first time was three years last March, after severe exposure by washing; got well in five or six weeks, she says, without taking any medicine. The second attack was in the March following, when she took some powders, and soon got better. Last March she was again attacked, and on her admission to the hospital her abdomen was greatly swollen, measuring, at different times, 38½, 37½, and now 38 inches in circumference, her limbs were also largely swelled. The urine deposited a large quantity of albumen. She was ordered the same treatment as in the former case, and is progressing favorably. The urine to-day is less coagulable, and yet, by the nitric acid test, the albumen appears still abundant. She is losing the anæmic condition she presented when she was first admitted, and the swelling of her limbs is decidedly decreasing.

PHOSPHATIC DEPOSIT IN THE URINE.

The history of the case I am about to present before you is as follows: The patient is a man, forty-two years old; admitted October 1. Two years ago had difficulty of voiding his urine; some numbness of left arm continuing during the year. During the year past he has had incontinence of urine, passing it very frequently, and in small quantities; for the five months past he had increased numbness of left arm, extending down the side and thigh. He has no cough, no headache, his general health is good, has the appearance of a robust, hearty man; he is inclined to costiveness; no sign of any visceral inflammation. Upon voiding his urine on one occasion, a drop of it fell upon his shoe, which he observed to leave a white sediment. On examination of the urine, you will discern that it is muddy, decidedly ammonical, and offensive in its odor, and flocculent. It is also alkalescent. Upon applying nitric acid to it, it becomes entirely clear, showing the absence of albumen, and on heating it you observe it becomes quite thick, with a flocculent deposit which the acid again dissolves. This deposite is an earthy phosphate, and upon evaporation, exhibits the crystals of the ammoniated magnesian phosphate, delineated by Dalton in his Physiology. Notwithstanding, he passes his urine so frequently, the introduction of a catheter relieved the bladder of nearly a pint, which exhibited a strong ammoniacal odor. There is, evidently, then, in his case, a partial loss of expulsory power in the muscles of this organ, a slight paralysis, and, I should fear, some affection of the spine. A stone might be suspected, but an examination reveals none. The condition of the urine in such cases is minutely described in Dalton's Physiology, in the article on changes in urine during decomposition, to which I would refer you.

The treatment to be pursued in this case is to give him the tinct. nux vomica, ten drops three times a day, together with the compound tinct. of bark; wash the bladder out with warm water, and use a liniment of tinct. cantharides and oil of turpentine as a stimulating application to the spine.

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

September 10, 1861.

Doctor Daniel Ayres, President.

After a recess of some weeks the Society resumed its labors.

A communication was received from Chas. E. Halsey, M.D., now in Alexandria, Va., tendering his resignation as Secretary of the Society, his time and services belonging henceforth to the Mozart N. Y. State Volunteers, Regiment. The Society had no alternative but to accept the resignation. The faithful and able services of the Doctor were, however, duly appreciated by an appropriate resolution. Dr. Willets was thereupon elected to fill the post.

Dr. J. H. Hobart Burge presented to the Society a new instrument for removing foreign bodies from the œsophagus and trachea. It is a pair of forceps, so constructed that a gentle movement of the handles, by means of the thumb and index finger, causes the blades to open and shut, while the rest of the instrument remains apparently motionless. This is effected by the rolling character of the hinge which connects the two blades, and which extends throughout the whole length of the straight portion of the instrument—about six inches. The handles are at a right angle with the blades, and are consequently out of the line of the operator's vision. The blades are rounded and smooth upon their outer surface, flat and slightly roughened where they are in apposition, and when closed form a simple curved staff of the most convenient size, and which may be manipulated with less danger of exciting spasmodic action than attends the introduction of instruments into these passages generally. Dr. Burge hoped this simple construction might prove an additional means of relief in a class of cases annoying to the practitioner, and distressing, if not dangerous, to the patient. He suggested also, its use for the removal of pseudo-membrane in diphtheria and croup, and for the removal of small calcui, pieces of gum bougie, etc., from the urethra. Manufactured and sold by Geo. Tieman & Co., 63 Chatham street, New York.

Cases of Intra-Uterine Fibrous Tumors—The Feasibility and Method of their Removal Discussed.

Related by Drs. John Cooper, Jones, Daniel Ayres, and Louis Bauer.

Dr. John Cooper, presented, on behalf of Dr. Vanderveer, a uterus completely filled by a fibrous tumor. The specimen was removed from a maiden lady who died at the age of seventy years. The disease had existed for thirty years, unmolested by any treatment whatever. On examination, the uterine mass is pyriform in shape, and very uniform in its antero-posterior and lateral diameters, rising perpendicularly to the height of nine inches, and measuring eight and a-half inches transversely, at its thickest portion. The uterine walls are greatly attenuated, and at no point exceed one-fourth of an inch in thickness. The os uteri is patent to the extent of one inch, and its lips very thin.

The intra uterine mass is fibrous in structure, its superior portion interspersed with calcified points, whilst the inferior portion, presenting at the os, and measuring two and a half inches in diameter, is very firmly ossified and separated from the mass of the tumor by a distinct line, so that when the separation has been made, a smooth cup-like depression is left.

The whole tumor is loosely united with the uterine walls by connective tissue, thicker on the left side—from which it is *readily* enucleated. There is nothing indicating the formation of a pedicle. The growth, which has probably taken its origin from the right uterus wall, has apparently pushed its covering (the lining membrane of the uterus) over to the opposite side; the two surfaces becoming there agglutinated. A small pedunculated tumor, the size of a hazle-nut, is also found projecting into the peritoneal cavity.

Dr. Jones stated that the preceeding case brought to his mind a case of intra-uterine tumor, complicated with pregnancy, having occurred in his own practice. On being summoned to attend this patient, who supposed herself in labor, he found no uterine contractions, and left her. Being a second time called to the patient, he found her dead upon his arrival. On post mortem examination, the immediate cause of death was discovered to be apoplexy, depending upon disease of the cerebral vessels. In addition to a half-grown fœtus, the uterus contained a number of fibrous tumors, the greater mass of which was attached to the fundus. Near the os there was one closely resembling a child's head at full time. The Doctor adverted to the extreme vascularity of these growths, and remarked that the size of some of the vessels was sufficient to permtt the introduction of a finger. On the strength of his observation, he insisted upon the extreme danger attending their removal.

Dr. Daniel Ayres did not consider the conclusions of the previous speaker warranted by the facts to be observed in the majority of cases, and contended that the anatomical condition of these tumors de-

pended very much upon the exact locality in which they originated. If near the abdominal surface, they would protude into that cavity, raising the peritonæum; if occupying a middle position in the uterine wall, and gradually encroaching upon the uterine cavity, a coalescence takes place between the mucous membrane of the opposite side. Strictly speaking, such a growth is not intra-uterine, and its investment is simply the convertive tissue of the uterine walls. But if the former starts close to the mucous lining, the latter readily yields to the progressive growth of the former, becomes invested by it, and gradually elongates into a pedicle. The fibrous tumors thus formed are strictly intra-uterine, and known as fibrous uterine polyps. The vascularity of all these tumors was chiefly upon their surface, and derived from their respective investing tissues. Thus we find the surface of polypi of a deep red color, and bleeding copiously and persistently on the slightest abrasion, whereas their parenchyma may be comparatively pale and devoid of vessels. This anatomical arrangement accounts likewise for the fact that fibrous tumors of some magnitude undergo calcareous degeneration, and centric disintegration due to inefficient nutritive supply. Their loose connection with the adjacent tissues permits of ready enucleation when once these investments are cut through, and likewise permits a ready retraction of the divided vessels.

In exemplification of these facts, Dr. Ayres adverted to a case which fell under his observation within a few weeks, in which the attempt to remove a small portion of such tumor had been followed by so copious a hemorrhage, as to deter the operator from farther proceeding. Consecutive and persistent hemorrhages from the remaining mass, however, demanded peremptorily subsequent surgical interference, and when this was entered upon with the full appreciation of the source of danger, its entire removal was effected with comparative sllght loss of blood, and recovery followed.

With these facts before him, together with the encouraging results put upon record by reliable surgeons, he was decidedly of the opinion that the apprehensions entertained in encountering similar operations, were not well founded.

Dr. Bauer derived great interest from this discussion, as it bore directly upon a case which had been submitted to clinical examinations within a few days. The patient was an Irish woman, thirty-seven years of age, and unmarried. As far as could be ascertained, there is no hereditary tendency to the formation of abnormal growths. Till the last nine years the patient had been regular and well, though her menstruation had been rather painful and somewhat copious. Since that time she has suffered more or less in her uterine functions—there being a persistent feeling of heaviness and sinking of the womb. No tenderness had at any time prevailed. During the last two years she has been troubled with frequent micturition, so as sometimes to keep her busy during the night. Now she is occasionally able to retain the water the whole night, and when necessitated to pass it, is compelled to assume the erect posture. There has existed for some years, a leucorrhœa, which of late has become very copious and of an offensive odor. The color is more that of pus, and tinged with blood. Bowels moderately constipated.

The abdomen presented an oval shaped tumor in transverse position, movable, circumscribed, disconnected with adjacent organs, and protruding slightly into the smaller pelvis. It extends upwards midway between the umbilicus and ensiform cartilage. The tumor has a smooth surface and is apparently homogeneous. At places it is so elastic as to give the feel of fluctuation. In the erect postnre the base of the tumor inclines forward, and in the recumbent, it assumes a position corresponding accurately with the changes the patient makes. The general appearance of the abdomen is that of pregnancy at the seventh month; the umbilicus but slightly in its lower half. There is no movement perceptible within the tumor, and on the whole surface the percussion is dull.

The vaginal exploration in the erect posture discerns a resistant and elastic mass, that encroaches slightly upon the smaller pelvis and fills almost entirely its brim. Although it seems not to be connected with adjacent parts, yet it does not permit to be raised from that position. In sweeping with the finger over its surface, no difference of structure or unevenness could be noticed. The shape of the protruding portion seemed to be hemispherical, and is at its circumference surrounded by the lower termination of the uterus. As in parturition, the neck of the womb has entirely disappeared and merged into the general distension of the womb. The opening is not less than three inches in diameter, and the finger readily passes between the uterus and the tumor, the connections being in isolated fine strings, rather loose and easily separated. In the recumbent posture of the patient, the tumor recedes somewhat from the pelvic brim, and is slightly movable. In exposing the tumor by Sim's speculum, the patient being placed on knees and elbows, it shows itself of a brownish-red color, slightly mottled, and apparently well-supplied by vessels. A copious discharge was noticed to emanate from the uterus, which presented the characteristics already stated. The uterus sound could be readily introduced to the extent of some three inches, but was not carried beyond this extent, in order to obviate hemorrhage.

According to the statement of the patient, the tumor had developed itself within the last two years, but it is probable that it had existed for a much longer period.

The patient, of course, had consulted various practitioners, and received various contradictory opinions; most of them, however, in favor of ovarian dropsy. At one of the New York Hospitals attempt had been made for her relief. The operative attempt lasted for two hours, and had been apparently abandoned on account of copious hemorrhage, which left her in a low, anemic condition for several weeks.

Notwithstanding the size of the tumor, the long time of its existence, and the excessive expenditure of nutritive material in its maintainance and persistent growth, together with the operative attempts at its removal, which was followed by a copious hemorrhage, the health of the patient was by no means impaired. Her general appearance was good; her lips and mucous membranes red; her outlines

well preserved; her weight 121½ pounds, whilst her height did not exceed 5 feet 2 inches.

However this might be, the further increase of the tumor, proportionate to its size already acquired, would inevitably lead to a serious impairment of the general system, both by pressure and spoliation on the system, and therefore Dr. Bauer had earnestly contemplated its removal. Delay could do no good. The mechanical proportions between the tumor and the small pelvic cavity, had already been reversed, and the obstacles to passage would certainly become serious by postponement.

But a few years ago, the removal of intra-uterine fibrous tumors would have been considered extra hazardous; rupture of the usually rarified walls of the womb and hemorrhage, besides the difficulties in enucleating the morbid growth, would certainly have been looked upon as unanswerable difficulties. Not so any longer, Some three or four years ago Professor Langenbeck, of Berlin, ventured upon their extirpation, and did not shrink to follow them into the parenchyma of the uterus. His success was most satisfactory. In relating six cases in the "*Deutsche Klinik*" of that period, he admits that he had had his misgivings as every body else, but that he had been completely taken by surprise at the loose connections these tumors maintain, and the facility with which they can be separated.

All that is necessary, in his opinion, is to get at the lower termination of the tumor by careful incisions, and the rest can be done by the handle of the scalpel.

The specimen, which has given rise to this discussion, was very instructive on this particular point in presenting the connections between the fibrous tumor and the uterus, so loose and delicate as to be easily severed by a blunt instrument. As far as Dr. Bauer could ascertain it, he had made out the same anatomical relation in his case, by both finger and the uterine sound, and he therefore apprehehended no difficulty on that point.

Another argument had been furnished by the clinical observations of his distinguished friend, Isaac Baker Brown, of London, wo had but shortly and repeatedly gouged out the centre of intra-uterine tumors, with a view to break them up, which he succeeded in doing with but an indifferent loss of blood.

It is, however, obvious, as has been said, that the removal of tumors of this class should, if at all, be executed with despatch, in order to give the uterus a chance to contract and to arrest spontaneously the hemorrhage that might ensue. Eventually tampons and compression could be employed to overcome it. A deliberate and timorous detaching of such tumors, the doctor considered infinitely more dangerous than a resolute procedure.

In this case Dr. Bauer had fixed upon the following plan: He would first enter the centre of the intra-uterine mass with an ordinary perforator, and bear it up towards its periphery; then he would use his hand in detaching it by fragments, which would have the advantage of exposing gradatim the internal surface of the uterus. In the moment that its entire surface was free, it could contract, or styptics might at once be resorted to, if hemorrhage should necessitate them.

He had duly apprized the patient of the eventual danger to be entailed by the operation, which would take place at some future day, when its results would be duly reported.

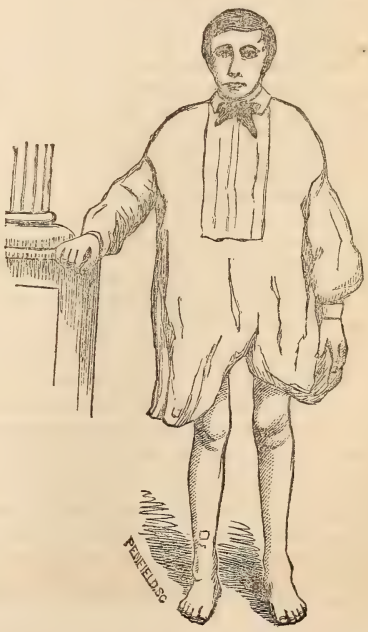
DR. LOUIS BAUER'S

Case of Double "Genu-Varum," or Knock-Knee.

The patient, a German lad, aged seventeen years, had suffered from congenital knock-knee to a mode-

Fig. 1.

Fig 2.



rate degree; but, since he had embarked in the trade of a baker two years ago, his deformity had so much increased that he could scarcely walk or stand. He applied for relief at the Brooklyn Medical and Surgical Institute. At his admission, he presented the appearance as exemplified in fig. 1. As the cause of his trouble, a contraction of both biceps, and vastus externus muscles were found to exist, and they were consequently divided. By means of four pullies and proportionate weights, two acting longitudinally and the others transversely, (fastened to the knees themselves,) the deformity was overcome, and when, after four weeks, the patient left the institution, he presented results as noticed in fig. 2. The improvement has since (four months) been progressive, and the locomotion of the lad perfectly free from any inconvenience.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

OBSTRUCTION OF THE LIVER, CAUSING ASCITES, ETC., TREATED WITH UNUSUAL REMEDIES.

In the *Lancet and Observer*, for September, our friend, Dr. C. A. Hartmann, reports a case from which we shall copy somewhat largely, because of the singular yet effectual treatment. We will try to condense the case as much as possible. The patient was a lady aged forty-five. She first, from cold, got suppression of the menses, and subsequently got copious uterine hemorrhage. This is her statement, though we suspect, from the report of the case, that she became pregnant, and, under treatment at the hands of a quack before Dr. Hartmann saw her, miscarried. She subsequently had frequent attacks of hæmatemesis. When Dr. Hartmann saw her, "her face appeared puffed up, wax-like, with a color mixed up from a pale yellow and a dirty gray, both colors being mostly distributed in irregular patches. Œdema had already spread from below to the upper third of both thighs; the abdomen, increased to the size of about the fourth month of pregnancy, presented the characteristic phenomena of ascites. The *liver* was also considerably increased in size and painful to the touch, particularly so on the line between the right and left lobe. Spleen normal; tongue slightly covered; radial pulse soft, not very full, and somewhat decreased in frequency, (60.) Breathing short; no irregularity in the chest. Urine stated to be very thick and turbid. Patient very much distressed on account of sleeplessness.

"The diagnosis presented no difficulty. There was evidently obstruction of the liver, to which all other symptoms were secondary." The following is Dr. Hartmann's prescription in the case: "One ounce of the seeds of St. Mary's thistle—boil with a pint of distilled water down to eight ounces, strain and add one ounce of white sugar. Of this decoction a tablespoonful to be taken every hour. Besides this, as an adjuvant, a decoction of flaxseed and leaves of the golden rod, equal parts, to be used as tea."

After two days the patient was found much improved; the treatment was ordered continued, and, in addition, "quassia water and acorn water, of each four fluid ounces, white sugar, one ounce; a tablespoonful to be taken every four hours. In three days more, hardly a trace of the œdema or ascites could be found; color of the face almost normal; liver no longer presenting any swelling, remains sensible to the touch, but is not painful. Fæces and urine evacuated freely; the former still semi-fluid. Appetite excellent." The quassia was now given alone, and the patient soon made complete recovery. Dr. Hartmann says he used the above mentioned remedies "on the strength of their being highly recommended in a work published some years ago in Germany, by Dr. Radermacher," from which work he makes the following quotation:

"1. *Carduus Marianus L., Silybum Marianum Gærtn., St. Mary's Thistle, Milk Thistle.*—The seede are one of the best remedies for obstruction and induration of the liver, bilious calculi, and diseases of the liver in general; hæmatemesis conseqent upon affections of the liver, jaundice, etc. The medical power resides in the membrane covering the seeds, which, on that account must be given either in coarse powder or decoction. A tincture may also be prepared from them.

"2. *Aqua Quassia. Distilled Water of Quassia.*—(Three pounds of the wood, nine ounces of the bark, one pound of alcohol, and water q.s. to obtain eight pounds.) One ounce given during the day, in divided doses, will be found very serviceable in ascites depending upon disease of the liver, especially after acute abdominal affections.

"3. *Aqua Glandium, Spirituous Water of Acorns.*—(Five pound of ripe and juicy acorns, coarsely powdered; alcohol, fifteen ounces; water q.s. to distil over seven pounds and a-half.) Unsurpassed in dropsy produced by affections of the spleen, and in these affections themselves.

"4. *Solidago Vigaurea, Golden Rod.*—An ancient but reliable remedy for certain diseases of the urinary organs, especially applicable when the urine turns dark and turbid in gastric affections."

A NEW REMEDY FOR THE NAUSEA AND VOMITING IN PREGNANCY.

In the *Lancet and Observer*, for September, Dr. Canaday has a paper, previously read before the Union Medical Society, at Knightstown, Ind., in which he gives his experience with, and strongly recommends remedies, soon to be mentioned, in the nausea and vomiting often so troublesome in the early months of pregnancy. "The remedy in question is a strong decoction of cornus sericia (swamp dogwood) and dioscorea villosa (wild yam), made by steeping equal parts of the dogwood bark and root of the yam in a sufficient quantity of water to make a strong decoction, administered cold in doses of one or two tablespoonsful every three or four hours." Dr. Canaday says he has used the combination in several cases, some very bad ones, that had resisted all the usual remedies and always with decided benefit, and that he is "inclined to look upon it as *the* remedy for nausea and vomiting in the early months of pregnancy."

We wish the Doctor would give *each* of the articles a trial *separately*, and thus learn whether the *combination* is essential. It is quite possible that the good effects are mainly the result of one of the agents.

In this connection we would call attention to a remedy for vomiting that we believe has been quite too much neglected. We refer to the common garden *larkspur*. We have used it for the last three or four years, both in the vomiting of pregnancy, and in cases not so connected. It has seldom or never disappointed us. We were first induced to give it a trial after reading an article on the subject in Mitchell's Therapeutics. He says: "More than forty years ago I experienced great embarrassment in my efforts to control the *vomiting* of autumnal fevers, prevalent near to the Philadelphia Lazaretto, where I was stationed as physician of the establishment. I was induced by the representations of a worthy old lady, to make trial of the larkspur leaves and flowers, in the form of infusion. The remedy acted, as some would say, like a charm. It was quite nauseous at first, but gave such delightful relief that the patient begged to have the dose repeated. I never knew it to be rejected. On the contrary, it calmed the stomach speedily. The infusion was made of half an ounce of the leaves and flowers, added to a pint of boiling water. The dose, a wineglassful to be given every half hour or more frequently if necessary."

As a remedy for morning sickness in pregnancy, some one has advised that the patient take her breakfast in bed, and remain in bed for two hours thereafter.

TREATMENT OF MORBUS COXARIUS.

In previous numbers of our *Summary* we have referred to, and given a description of, the mechanical appliances for the treatment of "*hip disease*," as respectively invented by Drs. H. G. Davis, and Dr. L. A. Sayre, both of New York, and Dr. E. Andrews, of Chicago. In the *San Francisco Medical Press*, for July, Prof. E. S. Cooper gives his treatment of this troublesome affection, and, as his mechanical appliance differs somewhat from either of the three previously referred to, we shall give it to our readers. We will not attempt to decide in regard to the comparative merits of the appliances respectively—our readers will make their own selection when they need an article of the kind, or do as each of the physicians mentioned above have done, *invent a new one.*

Prof. Cooper says: "Our local treatment, in this malady, is of two kinds, the mechanical and the surgical. The mechanical consists of apparatus, which keeps up for months, or even years, extension and abduction—extension made from the knee, and abduction from the upper part of the thigh.

"The apparatus is constructed as follows: A plaster of Paris impression is taken of the hip, from 1 to 2 inches above the trochanter major to 2½ above the crest of the ilium, and over about as much space laterally. A thick plate of tin is then moulded to suit the plaster impression, by which, when applied on the hip, it fits nicely to a large amount of surface. A firm frame of tin, about two inches high, an inch wide, and two inches long, is soldered to this, the long direction being on a line with the thigh. A tin rod, an inch in diameter, is next fastened to the end of the frame described, and is long enough to reach three or four inches below the knee. At the lower extremity is a loop, to which the extension straps are fastened, the extension being made from just above the knee-joint. There is a loop on the top of the tin frame, for the reception of the abduction strap. The original tin plate is fastened in its situation by means of a broad belt of leather attached to it, and passing around the body.

"The apparatus, in addition to its being exceedingly simple and cheap, has the advantrge of effecting more direct abduction of the head of the femur than others now in use, which is a *sine qua non* in the treatment of hip-joint disease, so far as mechanical contrivances are concerned." . . . . . "We keep it applied day and night, and often have patients sleep better the first night after its application than they had done for months previously."

In regard to fastening the splint to its place, he says:

"This is sometimes effected by having it covered with buckskin, slightly padded on the inside, and buckles attached to this for the reception of straps, which belong to the leather belt passing round the body. This belt is nearly as wide as the plate of tin. A cheaper mode,

and one equally effectual, is to fasten a piece of heavy calf skin to the inside of the splint, by means of tinner's rivets, and attach buckles to this. Light cushions may be applied between the apparatus and the part it presses upon, whenever necessary."

NEW SURGICAL PRINCIPLES.

In the *San Francisco Medical Press*, for July, Prof. E. S. Cooper enunciates the following, which he calls *new surgical principles*, upon which he invites criticism and discussion:

"1st. That atmosphere, admitted into the joints or other tissues, is not a source of irritation or injury, except where it acts mechanically; as, when admitted into a vein, by producing asphyxia; into the thoracic cavity, by its pressure producing collapsing of the lungs, or when, by the long-continued exposure of a large amount of surface of any of the internal organs, whose normal temperature is much above that of the atmosphere, it reduces it so as to produce a morbid action.

"2d. That the division of entire ligaments about the joints is no impediment to their ultimate strength and mobility; but, on the other hand, this operation will often greatly facilitate the cure, by enabling the surgeon to open the affected part fully, for the purpose of applying medicinal surfaces to the articular surfaces, when these are ulcerated or otherwise diseased.

"3d. That the only true mode of treating ulcerations of bone, however slight, within the joint, is to lay it open freely, and apply remedial agents directly to the part affected.

"4th. That opening the joints early, in case of matter burrowing in them, is far more imperiously demanded than the opening of other parts thus affected, and the operation produces no further pain or inconvenience to the patient, in any respect, than when performed on parts remote from the joints.

"5th. That after opening a large joint, the knee, for instance, by an incision several inches long, the wound should be kept open by the introduction of lint, or other similar substance, until the parts within the articulation become healthy, and, in all cases, it should be made to heal by granulation.

"6th. That extensive wounds, opening freely the large joints, such as the knee, (even when lacerated, as by a saw, which must heal by granulation,) do not as often give rise to violent symptoms as very small wounds, such as are made by the corner of a hatchet, an adze, or a pen-knife; which heal on the outside by first intention.

"7th. That there are no known limits beyond which a tendon will not or cannot be reproduced after division, provided the parts are made to heal by granulation, and that the present acknowledged rule of two inches being the maximum distance in which the divided ends of a ligament or tendon can safely be separated, has not the least foundation in fact."

Upon the subject of air in joints, we would make a remark or two. Dr. Cooper claims that air in joints is not injurious—eminent surgeons of the present and of past ages claim the reverse. We believe *both* to be right. Air admitted into the larger joints especially, *will* produce unpleasant effects *providing a successful attempt be made to heal the external wound by first intention:* it *will not* prove injurious, *providing the wound be kept open so as to admit of the confinement neither of air nor of the discharges.*

Not long ago a medical neighbor of ours treated a *small wound* opening the knee-joint. An attempt was made to heal the wound by first intention; unpleasant consequences followed, and the patient died. We did not see the case, but we suppose amputation might have saved the patient. In contrast to this, we have just completed the cure of a *severe and terrible wound* of the knee-joint. A heavy blow of an axe was made, entering the joint nearly transverse, just touching the lower interior border of the patella, and nearly half severing the limb. It was dressed with reference to healing by granulations, and to the free escape of discharges. The patient was somewhat emaciated from confinement, but neither hectic fever or other bad symptoms occurred, and in a reasonable time the patient recovered with a useful limb—stiffened and angulated at first, but mobility was secured by timely passive motion and subsequent use.

REMOVAL OF THE PAROTID AND SUB-MAXILLARY GLANDS — INTERESTING FEATURES CONNECTED THEREWITH.

In the last year there has been considerable discussion in regard to the possibility of the removal of the *parotid gland*, in which Professors Titus Deville and Daniel Brainard have taken prominent parts—the former against, and the latter in favor of the possibility of the operation. In the *San Francisco Medical Press*, for July, our friend, Prof. E. S. Cooper, reports a case that, in regard to some peculiarities, we consider eminently worthy of reproduction here. Prof. Cooper says, that "the tumor was so involved that the parotid and sub-maxillary glands had to be removed, and so situated that it was impossible to take it away, without either removing a portion of the lower jaw, or detaching the temporalis, masseter, pterygoideus externus and internus muscles, and destroying the tempero-maxillary joint, and bringing the upper part of the jaw forwards to a sufficient extent to admit of the removal of the tumor, and afterwards replace the articulating surfaces, with the view of having a reproduction of the ligaments, synovial membranes, &c. The latter method, though without precedent, was adopted.

The carotid artery being ligated, as a preliminary step, the operation was continued, by extending the incision up to a line parallel to the top of the ear, dividing, necessarily, the pes anserinus. This was absolutely necessary, in order to make room for the subsequent steps of the operation. The other soft parts were removed from the external surface of the masseter muscle, when the latter was separated from the ramus of the lower maxilla by means of a sharp bone chisel, an instrument seldom employed by others, but one we could not dispense with in separating the soft parts from the bones in all operations involving these tissues. This being effected, the parotid gland was removed from its bed by the same instrument. The temporal muscle was then detached from the coronoid process, partly with the scalpel and partly with the chisel. The temporo-maxillary joint was next destroyed with the scalpel. The upper part of the lower jaw was then brought forward, until room was made for the removal of the tumor, which was over three inches in diameter in the directions, internally and externally, having filled the fauces to such an extent that, on looking into the mouth it appeared nearly impossible for the patient to swallow or breathe, which were effected, for the last three weeks prior to the operation, with the greatest difficulty.

"As stated before, that portion of the tumor embracing the parotid gland, was removed from its bed by means of a small bone chisel, in the following manner: The edge of the instrument was first shoved in, by the side of the tumor, as close to the temporal bone as could be. After passing it for half an inch, a prying motion was made, by which we could readily see that a portion of the bony structure was laid bare. This method was continued in successive steps, until all the posterior and internal attachments were broken up, which left the styloid process, to its base, plainly in view. The natural attachments of the parotid gland had been, to a great extent destroyed by the disease, from which cause the major portion of the difficulties usually attending its removal were not encountered.

"The most interesting feature connected with the whole case was the reproduction of the soft parts concerned in the temporo-maxillary articulation. For six weeks, parts of the articulating faces of the joint could be seen, the wound being kept open, with the view of admitting the discharge of any portion of bone that might slough, which is nearly always the case, to a limited extent, where muscles, as strongly attached as those to the lower jaw, are separated. At the end of three weeks after the operation, we could discover fibrin, in the shape of the external lateral ligament, stretching from the margin of the glenoid cavity down the cervix of the condyloid process. This would break, when the jaw was moved briskly, and continued breaking for nearly a week, when, at last, the substance had become sufficiently elastic to bear the motions of opening and shutting the mouth without giving way.

"The progress of the reduction of this joint was witnessed by from twenty to thirty medical men of this city and State.

"At the end of the sixth week, it was ascertained that a thin scale of bone, about one line and a half in width, was exfoliated from the posterior and upper part of the ramus, which, being seized by the forceps, was readily withdrawn. This continued up the back part of the condyloid process to the head, from which a thin scale was likewise sent off, including the entire articulating face.

"At this time, one week after the removal of the exfoliated bone, and seven from the operation, the joint is entirely reproduced, so that nothing can be seen there, excepting the red and healthy granulations covering it."

ERYSIPELAS AND ITS TREATMENT.

In the *Chicayo Medical Journal*, for July, Dr. J. S. Whitmire has an article upon the *nature and treatment* of erysipelas. In regard to treatment, he says he believes there is an antidote to the erysipelatous poison. "This agent, in my opinion, we have found in *iodine* and its preparations, it acting not only as an antidote to the poison, through the medium of the blood; but, also, as an alterative in rousing and changing the secretions, and as a tonic to the capillary system of the vessels, thereby instituting a curative process in the diseased parts by producing a healthy action." In regard to its effects, he further says, I confidently ask the profession to give it a fair and impartial trial, and they will not be disappointed in its results, and they will be enabled, in an ectasy of delight, to cry out with me, *Eureka! Eureka!*

Cases are reported, illustrating the effects of this extraordinary and supposed to be novel treatment. On examining the prescriptions, we find that *quinine*, in *two* grain doses; *morphine*, in *one-tenth* grain doses; *chlorate of potash* in *three* grain doses, and *veratrum viride*, in tolerably full doses, were *together* administered every *three hours!* Also, *iodide of potassium* in *seven and a half* grain doses, and *spirits of nitre* in *teaspoonful doses*, combined and given every alternate three hours! Now, we search in vain for the evidences that the *iodine* is the long sought-for specific in erysipelas, and we certainly cannot hold up the iodine and cry out Eureka! Quinine, morphine, and chlorate of potash are no inconsiderable remedies in the treatment of erysipelas; and, by the by, are not new nor peculiar to Dr. Whitmire. Iodide of ptassium is composed of one equivalent of iodine and one of potassium.

Now, we would ask the doctor, how he knows the grand ultimatum, the "*eureka*" effects, are produced by the iodine in contradis-

tinction to the potassium, or quinine, or morphine, or chlorate of potash, or veratrum viride, or spirits of nitre, or ipecacuhana—all of which were administered simultaneously and conjointly? By-the-way, in our hands, the spirits of nitre and iodide of potassium, which the doctor would exhibit in the same mixture, are incompatible!

We have noticed this article not because of its intrinsic merit, but because it is liable to deceive the thoughtless, and, more especially, because we would condemn such reasoning and such inferences.

Before concluding, we must, however, give the doctor the credit of using the iodine locally. He says:—"The local treatment consists in an iodine ointment prepared in the following manner:

℞.—Iodine, - gr. xxx.
Potass iod., - gr. x.
Alcohol, - f. ℥ ss.

"Rubbed together, in a porcelain mortar, till the iodine is thoroughly dissolved. Then add ol. ricini f. ℥ iij. ss, and triturate till it is thoroughly mixed. Bottle, and it is ready for use. With this ointment, I keep the diseased surface, and two or three inches beyond, well lubricated by three, four, or five applications per day, if required to keep it soft; and, to digress a moment, this is one of the most beautiful, as well as the most convenient, preparations of iodine ointment that I have ever seen, and may be used in any case where the officinal preparation is indicated."

This preparation of iodine treatment may be very nice, as we have no doubt it is; but Dr. Whitmire can hardly, in justice to others, exclaim, "Eureka! I have found it!" for really iodine has been used locally in erysipelas for many years. We conclude our remarks upon this paper with one additional quotation. In regard to the erysipelas cases, he says: "The general indications are always the same; and in *iodide of potassium* and the *iodine ointment*, with the necessary auxiliaries, we have a certain, safe, and speedy remedy. Since I have adopted this method of treatment, erysipelas, in my neighborhood, has lost much of its terror, and I speak to my patients of their speedy recovery as confidently as I do of interrupting a paroxysm of intermittent with the sulphate of quinine. I have given this remedy in doses of twenty grains every two hours, without ever having witnessed any of the poisonous effects spoken of by authors; but the quantity of water with which I invariably dilute it, may probably prevent any gastric disturbance, that might otherwise occur if given in a more concentrated form. Its entire innocence, therefore, in my opinion, is settled when this precaution is observed."

—o—

Dr. A. D. Markley, of Montgomery county, in this State, has been appointed Surgeon in the United States Navy.

THE MEDICAL AND SURGICAL REPORTER.

S. W. BUTLER, M. D.
R. J. LEVIS, M. D. } Editors and Prop's.
L. C. Butler, M. D., Assistant Editor.

PHILADELPHIA, SATURDAY, OCTOBER 12, 1861.

A correspondent who subscribed to the Medical and Surgical Reporter under the impression that it "would contain articles from the most prominent members of the different branches or schools of medicine, setting forth their peculiar advantages or differences," is disappointed at finding that it does no such thing. It is his own fault. The Reporter has, for many years, been known as an uncompromising advocate of the principles of legitimate medicine. Every number contains evidence of this, and it is formally announced in the Prospectus. Its editors are alone the exponents of those principles, either with their own pen or by the writings of those who, in their judgment, are capable of elucidating them, and they are not disposed to confide their trust to any parties whatsoever.

This journal is independent; but that does not mean that it will pursue every light, true or false, that professes to be a guide in medical matters. Its editors have too much respect for the good sense of their readers to present them such an *olla podrida* as seems to have been looked for by our correspondent, and too much regard for themselves to give such evidence of imbecility of mind as would be given by pursuing the course indicated by him in the above extract.

It is said that, during the seasons of high-water on the great rivers of the south-west, when they suddenly overflow their banks and flood the surrounding country for miles on either side, steamboats sometimes find it very difficult to keep the channel. There is a channel—the old bed over which the river has flowed for ages; but, in ascending these rivers at such times, unskilled pilots occasionally steer their boat up a bay, mistaking it for the true course, where the craft, by the rapid subsidence of the waters is left high and dry on land, while the pilot has an excellent opportunity of ruminating on his inexperience and want of skill and care.

We have witnessed the anxiety of officers of boats, under these circumstances, lest they should "take the wrong channel," and lose a trip, if not destroy their boat. The editors of the Reporter having much more at stake, are not less ambitious of their reputation and success. They have no inclination to explore the by-paths in medicine which would inevitably lead them into ridicule and disaster, and injure the cause which they desire to serve.

Any one who desires a reliable exponent of the progress of legitimate medicine—which absorbs the true and rejects the false of all the theories that are put forth—and an enterprising, faithful weekly record of passing events in the world of medicine, will, we feel assured, be gratified and benefited by a perusal of the pages of the Medical and Surgical Reporter. This is its mission—no more, no less.

WHAT IS PROOF OF LIVE BIRTH?

An interesting discussion is now going on in the English journals upon the question which heads this article. In a case recently before the courts, Vice-Chancellor Stuart decided that "pulsation of the heart is evidence of live birth." In this opinion, we understand Drs. Thomas Radford, Tyler Smith, and Freeman concur. Opposed to it, is that eminent authority, Dr. Francis H. Ramsbotham. All treat it as a physiological point, which can be decided only by medical men, and not by lawyers, however well-versed they may be in legal acumen. Dr. Ramsbotham has no hesitation in declaring the Vice-Chancellor's decision to be founded in error, and the reasons given for this opinion are substantially as follows:

"A great distinction should be drawn between intra-uterine and extra-uterine life—between that life which is preserved to the fœtus by it parent's intervention, and that in which the child carries on an independent existence of its own. In common parlance, life is considered to begin at birth; and a man's age is reckoned not from the time at which uterine life commenced, but from the time when he emerged into light. And this is quite proper even in a physiological point of view. As soon as a child is born, if living, it enters on a new phase of existence; organs hitherto dormant are called into activity; and functions necessary for the continuance of vitality, heretofore performed for it by its mother, are suddenly transferred to its own person, to be henceforth discharged by itself through an independent agency. The expansion and energetic action of organs previously collapsed and quiescent, and the development of functions previously unknown, constitute a state of being so different from that which has just terminated as to warrant us in considering the individual to have commenced the enjoyment of a new and fresh life; for, although the infant after its birth continues to be absolutely the same body as the fœtus while in utero, yet the changes which take place on the establishment of respiration are sufficient to stamp a decisive mark on the two conditions of existence as being perfectly distinct and separate from each other. The commencement of the action of breathing is universally regarded as heralding the entrance into life; and no medical practitioner would hesitate to certify as still-born a child that had never breathed, unless there were proofs present of its having been accidentally smothered before his arrival."

On the other hand, Dr. Radford, who has "for many years labored to raise the value of embryonic and fœtal life, and to depreciate as far as possible the *murderous operation* of *craniotomy* in the estimation of those who practice midwifery," says:

"If pulsation exists in the funis, there is strong presumptive evidence, more especially if it is felt at or near to the umbilicus, that the child possesses a greater or less degree of vitality; for it is physiologically true that, if the child dies, the placental circulation soon ceases, and with it almost immediately that of the funis, first nearest the child's body, but not long after in its entire length. To entertain a conrrary opinion would lead to a most disastrous practice, and would consign to the grave infants which might, and indeed would, be saved if (under conviction of suspended animation) resuscitating measures were energetically and perseveringly used."

The object of the discussion appears to be to fix the point where criminality in destroying the child begins, in such a sense as to constitute murder. If the latter opinion be correct, then life begins with the pulsation of the fœtal heart, and the operation of craniotomy, unless the evidence be unmistakable that pulsation has ceased, is equivalent to the commission of murder. If the former, then the actual estab-

lishment of the function of respiration is necessary to constitute a live birth. Practically, both opinions are, perhaps, true; both conditions constitute life in a certain sense. Those who consider the question in its legal light favor the former opinion, though not so strongly as to leave the accoucheur at liberty to destroy the life of the fœtus in utero, unless there be undoubted probability that the life of the mother must be sacrificed if it be not done. Those who base their opinion upon the physiological aspect of the question, reject the former opinion as incorrect, and as opening the door for an indiscriminate "slaughter of the innocents," before they shall have fairly disconnected themselves from the mother and established a separate existence. As exhibiting the difficulties that attend the question, we quote two cases, which we find in the *Lancet:*

"On the 14th of July, 1849, Mrs. ——, the mother of a numerous family, gave birth to a female child, at the end, as she believed, of only eighteen weeks; and appearances strongly corroborated her opinion. Some time after the supposed dead child was placed aside, my attention was called to it in consequence of some convulsive movements observed by the attendants; and, subsequently, for more than half an hour, the heart evidently pulsated, and convulsive action of the body continued to be distinctly observable. The action of the heart was evident to the eye by the pulsation it communicated to the chest, as well as to the hand placed over the cardiac region.

"On Oct. 25th, 1852, I was called to see Mrs. D——. Before my arrival the membranes had given way, and I found her labor rapidly progressing with a breech presentation. The funis ceased to pulsate rather more than eight minutes before I could extricate the head. The child, when born, was perfectly corpse-like, and the limbs flaccid. It was placed in a hot bath, and I perseveringly inflated the lungs, through the nostrils, for full twenty minutes before any sign of change occurred; after which time the lips slightly colored, then a feeble sigh was noticed; soon afterwards the lips and face were more evidently tinged, and gradually the corpse-like condition of the body gave way, and ultimately respiration was established. The inflation of the lungs was steadily continued for more than three quarters of an hour."

FRUITLESS SUCKING AND IDIOCY.

In a paper read before the *Royal Med. and Chirurg. Society*, of London, England, Dr. Thomas Ballard claims to have made a discovery on this subject which he is anxious to have recognized by the profession. "Fruitless sucking," by which he understands sucking the mother's breast when it does not yield as much milk as the infant requires, or the "sugar teat" which is frequently placed in the child's mouth by the nurse to keep it quiet, he maintains, causes a thinning and softening of the stomach and intestines, of which process the frequent and green stools are the evidence. Diarrhœa so common an affection of infancy, is the consequence. From this impaired condition of the *prima viæ* an imperfect growth and nutrition of the tissues of the body obviously results, and this terminates in the pathological condition of the brain, and the various scrofulous manifestations so invariably associated with idiocy. Two centuries ago, Dr. Sydenham wrote that convulsions of infancy resulted from diarrhœa. His words are, "Epilepsia vel *primo mense* aggreditur a frequentibus nemis alvi dejectionis, vel *circa* dentitionis tempus," etc. Dr. Ballard's position is, that "fruitless sucking" is the principal cause of diarrhœa in infants, and that idiocy is a state to which the child is reduced by the persistent drain which this discharge produces upon its system, ending in frequently recurring convulsions, and in ultimate loss of intellectual faculties if they survive the convulsions.

Whether these views be correct or not, in a pathological point of view, they are deserving of consideration, and should lead to a thorough investigation of the whole subject, and may suggest a reason why so large a proportion of the deaths set down in our weekly mortality reports are of children under one year. In his work on the "Institutions of Austria," Mr. Wilde states that the mortality in the Vienna Foundling Hospital had ranged from 60 to 95 per cent. during fifty years, and that throughout Austria infantile mortality is very great, and chiefly from abdominal diseases. As an explanation of this fact, he says, "each infant,

no matter whether it suckles at the breast or is spoon fed, is provided with a kind of artificial nipple called zuzel or zulp, and formed of a bit of linen, in which a piece of pap or bread and milk about the size of the thumb is bound up," and this the infant is left to suck at its leisure. The result is diarrhœa, and death or persistent convulsions and idiocy. We commend the subject to the investigation of those who have the charge of Children's or Foundling Hospitals, and would invite them to give the result of their observations to the profession.

Correspondence.

DOMESTIC CORRESPONDENCE.

MEETING OF THE BOARD OF MEDICAL EXAMINERS—INTERESTING PROCEEDINGS.

Messrs. Editors:—A Medical Board for the examination of all Surgeons or Assistant Surgeons, now acting as such in any regiment of volunteers raised in the State of Pennsylvania, convened in the chamber of the House of Representatives, in Harrisburgh, at 9 o'clock this morning, October 9.

The Board consisted of Dr. Wilmer Worthington, of Westchester, Dr. Traill Green, of Easton, and Dr. Wm. Corson, of Norristown.

Surgeon-General Henry Smith, presided.

Shortly after the body convened, his excellency Gov. Curtin entered the Chamber, and was conducted to the Speaker's platform, when he was introduced to the assemblage by Surgeon-General Smith, in the following remarks:

Gov. Curtin:—In obedience to your orders I have convened a State Board of Surgeons, whom I have now the pleasure of introducing to you as distinguished members of the medical profession—as citizens deeply interested in the welfare of Pennsylvania, and as the warm advocates of the Union now threatened by the traitors assembled around Washington. [Surgeon-General Smith here introduced the members of the Board personally to the Governor.] I also introduce to you the large body of candidates who have so energetically responded to the intimation that our brethren in arms for the maintenance of the Government were likely to require their professional services. Like the combatants in the Isthmean games, these gentlemen have been engaged in a generous rivalry, and hope to gain, at the hands of your excellency, that awardment that will give increased honor to the laurels hereafter to be won on the battle-field.

Gov. Curtin followed, and, in greeting the assembly, remarked that he was glad to see a gathering so large in number, and so respectable in ability, convened in response to the Surgeon-General. The posts for which they were about to be examined, were of the highest importance, and, in responsibility, ranked with any in the service. The army surgeon held in his hands the health of the soldier, and when wounded and bleeding, it becomes his duty to save his life if possible. Certainly such a duty requires the highest skill, and therefore the State has wisely provided for the selection to be made from among the ablest in the medical profession, and for this purpose this examination was instituted. Gov. Curtin thanked the physicians present for their promptness in responding to the call of duty and humanity, and then commended them to the impartiality of the Medical Commission before whom they were to be examined.

There were one hundred and sixty-five candidates present for examination, who, as they were arranged around the circular desks, busily engaged writing out the answers to the printed questions before them, presented a scene of lively interest.

The examinations this morning were confined to the practice of medicine and materia medica, while the afternoon session was devoted exclusively to examinations in anatomy and surgery.

D. Holmes.

NEW YORK CORRESPONDENCE.

Jus summum sæpe summa est malitia.—*Juvenal*

In obedience to the instincts of nature, and prompted by a desire to learn something new relative to mental aberration, I passed a most profitable evening at the Academy of Medicine, where—after Dr. Martin had finished his suggestive remarks concerning face presentation and the universal error of all illustrated works that represent the extension of the chin before the rupture of the bag of waters—a paper was read (by permission) by Dr. I. Parigot, late Commissioner of Lunacy, and Chief Physician of the establishment at Ghul, Brussels, on "Moral Insanity in relation to Criminal Acts."

The substance of the Doctor's remarks was of that character that a description, rendered necessarily concise, would not do justice to the subject. The most subtle and metaphysical distinctions, the various stages of mind wandering, the most delicate tests of a sound intellect, and the proper treatment of persons indirectly affected, at once revealed a storehouse of latent information, and laid bare to view the vast importance of sufficient evidence, and the rare faculty which, at times, may be found in the minds of those who undertake to elucidate its mysteries and explain the morbid changes of the brain!

It was indeed refreshing to look upon this subject from a healthy and foreign point of view. One fact may be mentioned, the Doctor maintained that no patient should be convicted of lunacy till after, not only an examination and decision, but that the physicians should write out carefully their opinions—the diagnosis, prognosis, and pathological conditions, physiologically considered. Dr. Brown, of the Bloomingdale Asylum, spoke at length and to the point. Judge Edmonds and Dr. Gillman maintained that we must not go beyond the science of the public mind. The paper will be printed in full, and also discussed.

A paper is to be read before the surgical section of the Academy, which, from what I know of its contents, will produce no little sensation on account of its honest purpose—unfolding the truths of anatomy—and strictly conscientious treatment. It will be entitled "The insertion of the Capsular Ligament of the Hip Joint and its relations to the study of Intracapsular Fracture of the Neck of the Femur," and is to be delivered on the third Friday in October, by the author, Dr. George R. Smith, who for the past year has been most assiduous in collecting facts, not only from the writings and letters of learned surgeons, but chiefly by direct dissection and a personal examination of the never-failing cadaver.

Yours, Gourmet.

Army Correspondence.

An assistant-surgeon in one of the Massachusetts regiments, writing from Fort Albany, Va., to the Boston *Medical and Surgical Journal*, says.

"Excepting one week at Kalorama, we have been here since leaving Fort Warren. This fort (which, by-the-way, you may have visited) is situated on quite a high hill, or rather ridge, but is near enough to the lowlands for malaria to have a "right smart chance" at us. One of our companies has charge of Fort Runyon, two-thirds of a mile towards Long Bridge, on the low land; and another has charge of the Virginia half of the Bridge and Fort Jackson, situated at the end of the Bridge, and half a mile from Runyon. These two last-named localities are the chosen home of intermittent fever; the New York regiment preceding us there, reporting over four hundred cases in a month, occurring in not more than seven hundred men all told.

"When we came in possession of these forts, we found them all filthy to an extreme degree, especially Fort Albany. The New York regiment, while here, had no sinks for sick or well, officers or men; and it is no exaggeration to say that acres were so covered with filth and garbage, that only with the greatest difficulty could one walk with unsoiled boots, while the stench was absolutely sickening. By consent of the surgeon, I was appointed by the colonel a "Sanitary Commission," with unlimited authority as to the use of men, shovels, and teams, provided they could be spared from work on entrenchments, (which proviso hindered me considerably.) Borrowing a plough, I soon turned under a good top dressing upon about half an acre and a half, had ditches and sinks dug, and had the garbage of the cook-houses carted away and buried every day. That this labor was not thrown away, is proved by the fact that three of the eight companies at this place, though it was called by old residents "a mighty bad place for chills," have no one in the hospital, and the other five have but six. And so far as the labor and care were concerned—and there was not a little of both—I felt amply repaid when, a few days ago, Gen. McClellan stopped with his staff and escort to say that the camp of our regiment was the cleanest and best ordered of any one within his knowledge—that he considered it as a *model*, and always spoke of it as such.

"As soon as we came here, we, at the suggestion of an old army officer, had coffee distributed smoking hot to the men on guard during the night, and I think it has proved beneficial in warding off the effects of malaria. Having three forts, our men have a great amount of guard duty—each man often going on every other day for a week or two, and always twice a week. Recently, Gen. McClellan has ordered coffee in the morning, on rising, to all the men, which, however important, is, in my opinion, not so much so as that those out during the night should have it. We are now, in spite of all our precaution, having quite a number of cases of intermittent, though of a very mild type. Most of the cases get well in from three to six days: i. e., of the fever—not up to full strength—and we have not had more than three or four lasting over ten days. To-day we have fifteen in the hospital, nine being from the two companies at Runyon and Jackson, thirteen being intermittent; and, besides these, we have about a dozen very light cases reported 'sick in quarters.' Very few of our cases have any shaking, or decided chill, but commence with general feverish symptoms. Mild treatment (so mild as to excite the laughter of our neighbors from the West) has proved sufficient so far. A light emetic of ipecac, if the symptoms are severe; a little castor-oil, if any need for it seems to exist; and from six to ten grains of quinine a day, usually winds them up shortly—the quinine being continued in about three-grain doses per diem for a few days after the fever has left.

"Of typhoid, we have had but one well-marked case, which we left at Kalorama, (Columbia College Hospital,) when we came here, and which is now convalescent.

"Diarrhœa was quite prevalent at first, and we had a few light cases of dysentery; but of late we have had but very little of either.

"We have had three deaths—the first very sudden, during sleep, supposed to be "organic disease of the heart, as his father died in the

same way. The second died in the infirmary where he had been placed with fractured femur, at a time when an attack was daily expected; and the third was actually shot while on guard."

The surgeon of the 18th writes:—"You will be pleased to learn that our men are in good health. The staff-officers are all gentlemen and men of refinement. In such company one can cheerfully submit to toil, privation, and fatigue, and the many vexations inseparable from the breaking in of the 'Yankee sovereign' into a soldier. I recently amputated, through the metatarsal bone of the lesser toes, for a gunshot wound, leaving the great toe. The stump is a beautiful one."

The surgeon of the 12th Regiment writes from Pine Camp, near Muddy Creek Ford, Md.:—"Since writing you, we have moved our camp from Darnestown to this place, six miles distant. We are now guarding one of the most important fords on the Potomac, and have to keep constantly on the alert, not knowing at what hour we may be attacked. Our camping ground is the most beautiful spot I ever saw—on a high, sandy ground, about a quarter of a mile from the Potomac, and surrounded by pine trees, very well protected from the miasmata rising from the river, and our picket guards have good buildings for headquarters. The men are in remarkable health, only four in hospital. In fact, we could not be more pleasantly situated, and I was never happier in my life."

Surgeon Otis, of the 27th Regiment, in camp at Springfield, writes:—"I am gratified to report the remarkably good health of our camp. There were to-night 689 men in quarters. I have three tents provided with rough but comfortable bunks, where I have treated the more serious cases of diarrhœa, which affected a number of the men commencing camp life during the inauspicious weather of the last week. The most serious case that has occurred is a peculiar one, of profuse pulmonary hemorrage, resulting from a blow on the lower lateral portion of the left chest, accidentalcy inflicted by the elbow of a comrade while they were drilling at double quick time. The patient, a robust subject, exempt from any obvious thoracic disease, is convalescing. I had a spare servant's room, and provided for him at my house. All my associates on the staff second my exertions for the proper sanitary regulation of the camp."

—o—

Nitrate of Silver.—This article is now manufactured, it is said, by Dr. G. F. Parkison, a chemist, in Charleston, South Carolina.

The Richmond Inquirer of a late date says, a notable change has taken place in the character of our camp diseases. The prevalent typhoid fevers is far less virulent than formerly, and yields with comparative readiness to careful medical treatment and good nursing. Measles and ordinary fevers are also rapidly abating.

NEWS AND MISCELLANY.

Introductories.—The introductory lecture at the University of Pennsylvania will be delivered on Monday, Oct. 14, at 12, M., by William Pepper, M.D. At Jefferson Medical College, on the same day, at 8 P.M.

The introductory at the Philadelphia School of Anatomy and Operative Surgery, will be delivered on Thursday evening, Oct. 17, at 8, by D. H. Agnew, M.D. Subject—*Biographical Sketch of Baron Larey, Surgeon to Napoleon's army*.

The lectures in this school are given every evening in the week from 7 to 8 o'clock.

At the regular stated meeting of the Board of Guardians of the Poor, on Monday last, Dr. S. W. Butler was re-elected Physician of the Insane Department of the Pennsylvania Hospital for the ensuing vear.

The Naval Medical Board, composed of surgeons Lockwood, Wheelwright, and J. Y. Taylor, are in daily session at the Naval Hospital, Brooklyn, to examine candidates for the post of assistant-surgeon. Properly qualified medical men have now an opportunity of entering the navy under favorable circumstances. Candidates (who must not be over twenty-six years of age) should apply to the Hon. Gideon Welles, Secretary of the Navy, requesting permission to be examined, stating their age, places of birth and residence, accompanying their application with suitable testimonials of moral character. The examination is rigid but fair, upon such branches of professional knowledge as are taught in respectable medical schools.

The following list contains the names of successful candidates selected to fill vacancies created by recent increase of the corps. The number of vacancies yet remaining to be filled is about twenty-five:

J. W. Bragg, Mass.; Geo. R. Brush, N. Y.; Charles Carter, N. Y.; Steph. J. Clarke, N. Y.; E. R. Dodge, Pa.; R. T. Edes, Me.; S. R. Foreman, N. J.; Wm. F. Fort, N. Y.; J. H. Gunning, N. Y.; A. H. Hoebling, Pa.; J. H. Hazelton, N. H.; Edgar Holden, N. J.; Joseph Hagg, N. J.; William C. Hall, N. Y.; B. H. Kidder, Mass.; T. B. A. Lewis, N. Y.; Edward Kirchner, Md.; William B. Mann, N. Y.; J. Howell Mears, Pa.; E. D. Payne, Pa.; C. H. Perry, R. I.; B. F. Pierce, Me.; D. F. Ricketts, Md.; George T. Shipley, Mass.; Herbert Smith, N. Y.; C. E. Steadman, Mass.; D. M. Skinner, N. J.; T. Cameron Walton, N. Y.; Louis Zinzin, N. Y.

Vermont Medical Board.—The Board of Medical Examiners for this State consists of Samuel W. Thayer, Jr., M.D., Prof. Anatomy, etc., in the University of Vt.; Edward E. Phelps, M.D., LL.D., Windsor, Prof. Theory and Practice, etc., Dartmouth College, N. H., and Selim Newell, M.D., St. Johnsbury. The Board convened at the American House in Burlington,

on Tuesday last, Oct. 8th, at 9 o'clock A. M., for the purpose of examining such as applied for appointment to the medical staff of the Vermont Volunteer Militia. Constituted as this Board is, of men who are eminent in the profession, we are satisfied that the most thorough qualifications will be required in every candidate, and that the surgeons of the Vermont Volunteer Militia will rank well with those of any other State in the Union.

The number of sick in the several hospitals, at Washington, for the week ending Sept. 27, was 879, a slight decrease from the week previous. Of eruptive diseases there were 52 cases.

To Correspondents.

Postage Stamps.—Subscribers will please *not* send us the old style of stamps, as they are worthless to us, not being received for postage at the Office in this city. They will also please send us *only one* and *three* cent stamps. tf

Dr. L. E., Schenectady, N. Y.—Send $3 by mail. We share the risk, which is very small. If you want the "Hand-Book of Practice" send $3.60, and it will be returned by mail, pre-paid.

Dr. J. V. E., Pa.—The price of Ashton's Work on Diseases of the Rectum and Anus, etc., is $2. Send the money, and we will send the book by mail or express, as you direct.

Dr. M. R. H., N. Y.—We cannot afford to send you the Reporter on the terms you propose. Besides, it would be unjust to other subscribers. We are aware that our cotemporary pursues that course, but he will, in the end, be in every way the loser by it. We do not choose to follow the example. By the inclosed circular you see that we offer a very liberal and useful premium to subscribers, and would be glad to enrol your name among them.

Dr. J. H. D., Mass.—The postage on the "Hand Book of Practice" has to be *pre-paid by us*, so that *sixty cents* is all that it will cost you. The retail price of it is $1.25.

M. D.—Oxalate of cerium has been much used experimentally by practitioners for the purpose of allaying nausea and vomiting in pregnancy, and from other causes. But little evidence of its efficiency has been presented, whilst very many failures have been recorded. It would be well if those who have tried the article would report the result.

W. S.—Paralysis following diphtheria has frequently occurred. The powerful impression of the disease on the nervous system will account for it. A brief report of the cases will be acceptable.

H. P.—To become a candidate for membership in the Philadelphia County Medical Society, a physician must be a citizen of the county of Philadelphia, a graduate of at least three years' standing of a respectable medical school, a licentiate for a similar period of some approved medical institution, or a regular practitioner of at least fifteen years' standing, and of good moral and professional reputation. No physician, removing into the county, is eligible for membership until after he has been engaged one year in the regular practice of medicine within the county.

S. I.—Nothing further has been developed in regard to Kerosolene than what we have already published. Our own experimental experience with the article has not added much to our knowledge of its effects, but from a personal inhalation of it, we are disposed to state our appreciation of it as a very *disagreeable* anæsthetic.

Communications Received

Connecticut.—Drs. N. Brigham, A. H. Fagan, J. C. Bolles, W. Woodbridge, A. H. Hough, each with encl.; Dr. N. G. Hall; Dr. B. F. Harrison, with encl. *Delaware.*—Dr. G. P. Norris, with encl. *Illinois.*—Dr. D. Roberts, with encl. *Indiana.*—Dr. F. C. Eckleman, with encl. *Iowa.*—Dr. G. M. Staples, with encl.; Dr. H. Minges; Dr. J. Sprague; Dr. Wm. B. Blakesbury, with encl. *Massachusetts.*—Drs. T. P. Knox, G. W. Dennet, T. J. Stevens, C. Eastham, T. E. Francis, E. P. Somerby, J. C. Baker, (each all right.) Dr. J. C. Cornish; Dr. J. C. Baker, with encl. *New Jersey.*—Dr. J. S. Schenck; Dr. W. Pierson, with encl.; Dr. Marcy, with encl.; Dr. N. S. King, with encl.; Dr. J. B. Somers, with encl. *New York.*—Dr. L. Elwood; Dr. Louis Bauer; Dr. O. C. Gibbs; Dr. H. Mitchel, with encl.; Dr. C. G. Bacon, with encl.; Dr. M. R. Holbrook; Dr. J. Farrar; Dr. R. Orniston, with encl.; Dr. F. Bond, with encl.; J. R. Vanderveer, with encl. *Ohio.*—Drs. Jos. Merrill, E Lynch, J. D. Skilling, each with encl. *Pennsylvania*—Drs. G. W. Hoover, J W. Rugh, Jas. Parker, Jos. L. Cook, M. D. Hill, J. B. Livingston, F. H. Brower, J. V. Epler, R. Brown, Jacob Hay, J. M. Stevenson, H. Carpenter, B. F. Butcher, J. C. Yager, S. C. McCormick, H. S. Jacoby, J. M. Reichardt, A. Murphy, J. G. Crouse, P. R. Wagenseller, J. Montgomery; J. W. Mackey, each with encl.; Dr. D. Holmes. *Rhode Island.*—Dr. W. H. Wilber; Dr. P. Day.

Office Payments.—Drs. Whillden, Forwood, Burmeister, Martin, Price, Snively, Kelly.

VITAL STATISTICS.

Of Philadelphia, for the week ending Oct. 5, 1861:

Deaths—Males, 114; females, 102; boys, 65; girls, 70—Total, 216. Adults, 81; children, 135. Under two years of age, 77. Natives, 172; Foreign, 31. People of color, 13.

Among the causes of death we notice—Apoplexy, 3; convulsions, 12; croup, 5; cholera infantum, 6; cholera morbus, 0; consumption, 22; diphtheria, 4; diarrhœa and dysentery, 4; dropsy of head, 10; debility, 8; scarlet fever, 19; typhus and typhoid fever, 8; inflammation of brain, 4: of bowels, 4; of lungs, 13; bronchitis, 2; congestion of brain, 2; of lungs, 2; erysipelas, 1; whooping cough, 0: marasmus, 13; small pox, 6.

For week ending October 6, 1860.....209
" " " 5, 1861.....215

Of Boston, for the week ending Sept. 28, 1861:

Deaths—Males 44; females, 36. Total, 80. Under five years of age, 49. Natives, 64; Foreign, 16.

Among the causes of death we notice—Phthisis, 10; cholera infantum, 16; croup, 0; scarlet fever, 4; pneumonia, 2; variola, 0; dysentery and diarrhœa, 2; typhus and typhoid fever, 2; diphtheria, 0.

Of Brooklyn.—The total number of deaths in that city last week was 107. The principal diseases were—Consumption, 12; cholera infantum, 19; marasmus, infantile, 13; convulsions, 0; diphtheria, 5, etc. Adults, 35; children, 72, of which 37 were under one year of age. Natives of the United States, 88; Ireland, 12; all other countries, 7.

Medical Directory.

Under this head we propose to give such information in regard to the Medical Colleges, Hospitals, and Societies of the City as we may be able.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.
Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr J. F. Meigs.
Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Jefferson Medical College, Tenth, above Walnut.
Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.
Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.
Medical Clinic on Wednesday's and Saturday's, at 12 M. by Prof. Pepper; at 1 P. M., by Prof. Smith.
Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery.—Clinical Lectures Saturday's, at 3 P. M., by one of the Professors.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 261. PHILADELPHIA, OCTOBER 19, 1861. NEW SERIES, VOL. VII. NO. 3.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Water: its History, Characteristics, Hygienic, and Therapeutic Uses.

By Samuel W. Francis, A.M., M.D.,
Of New York.

(*Continued from page* 6.)

In the composition of various remedies, for therapeutic purposes, their purification, distillation, solubility and effectual agency in removing disorders, not unfrequently depend, for aid, on the sure properties of water.

The minds of busy cogitators, ever on the scent for novelties in treatment, cling to this pure element as the best, swiftest means of gliding down the stream of life, until some rare panacea may be found; some certain method for alleviating suffering loom up in the distant vista of futurity and crown their labors with success. Being well aware that in deductions of a philosophic character, a scaffolding is needed for hypothesis ere truth may be erected, they consent to base their platform on the limpid waters that it may move on with gradual persuasion, influenced by proper theories, not sullenly confined to the dull round of idle, self-sufficient reasoning.

From the period when the careful* student of life's ways advised a proper use of water, and, with force, recommended it in sickness.

"Post hæc, omnibus fatigatis aptum est cibum sumere, eoque humido uti; Aqua, vel certe diluta potione esse contentos; maximeque ea, quæ moveat urinam:" when even in old times important sinners used it as a vehicle for poison, as we read in the description of the celebrated Aqua Toffana, in the german Toffanisches Giftwasser, and called by Italians Aquetta Italorum,* whose properties were mighty, and its composition: "vera compositio hujus veneni medicos adhuc fugit, at arsenicum crystallinum in larga *aquæ* copia per simplicem, decoctionem solutum esse videtur;"† when Galen and Agattainus, Cælius and Helmont, Harder of Petersborough, and Karl of Denmark, (1757,) together with hundreds more, extol its power and unfold its capabilities, we need but to turn over the well written pages of a few distinguished writers to discover their partiality to its utility, their leaning toward its kind assistance. Whether we examine with care the water blowpipe, as described by Bowman, and discused by chemists,‡ or enter into the real merits of the observations of De Haen,⁋ and Shebbeare,‖ relative to human fluids; whether we pursue with care the "Experimental Inquiries" of the physiologist, Hewson, in regard to blood, or seek to weigh the views of Zaccheus,¶ and Dumas,** Pringle,†† and Hunter,‡‡ as relating to the animal economy we see in one and all of their conclusions and terse emanations, here and there sincere allusions to the vast conduciveness of water.

The sensitive imaginator, as he wanders:

"O'er many a frozen, many a fiery Alp, rocks, canes, lakes, fens, bogs, dens, and shades of death," learns more of practical duribility than the stay-at-home perusers of vast tomes; but, while reading the results of learned schemes and closest studies, more is ascertained that may prove useful and of import in the way of cure.

We are informed by the chemist, and can judge for ourselves, of the following facts: Malic acid is soluble in water and alcohol. The kinates are prepared, by using at the proper

* Celsus de Medicina, lib; 1, cap. iii.

* Josephi Jacobi Plenck-Toxicologia seu Doctrina de Venenis et antidotis, viennæ, apud Randalphum Græffor, 1785.

† Vide III Hoffman Med. Rat. System, T. II.

‡ Practical Pharmacy, etc., by Mohr. Redwood & Procter.

⁋ Ratio Medendi.

‖ Practice to Physic.

¶ Quest. Med. Legal.

** Principes de Physiologie.

†† Diseases of the Army.

‡‡ Treatise on the Blood.

time water at the temperature of 68°. The cephælis ipecacuanha is not used medicinally, after being separated from the stem, till dried. The syrup is also made by evaporation by means of the water-bath. Tartar emetic, first introduced by Adrien Mynsechs, 1631, requires the use of one gallon of water in its preparation, as a vehicle, agent and useful go-between; and is administered in solution with pure water. Zinc, subjected to severe popular criticism in 1280—though strongly advocated by the ancients, is obtained in the form of sulphate, for administration, by the decomposition of water. Sulphate of copper is procured by evaporating the waters that hold it in solution. Scilla maritima comes from the Mediterranean, and is universally employed. The lobelia inflata is one of the surest emetics, on account of its being readily absorbed by the fluids of the body. The anthemis mobilis is taken by the patient in the form of an infusion. Were the ricinus communis not boiled with water, after undergoing the expression from a powerful screw, its impurities would render it unfit for use, and the pure oil would not be found. Magnesia usta is prepared by driving off great quantities of water and carbonic acid by an intense heat. Sulphur lotum is distilled and washed till litmus indicates no traces of red stains. Did the sap of the ornus rotundifolia not flow out, indebted for mobility of particles to water, the flake manna would be wanting, and its use unknown. Until the roots of the rheum palmatum are dessiccated its conduciveness is limited. We are beholden to the inspissated juice of the aloes which, after flowing out at man's decree, gives up its vapor and leaves the pure liquid as a remedy of vast aid in therapeutics.

Though jalap is restrained in yielding up its virtues to pure alcohol, when mixed with water it abandons all its properties and seeks but to resign the essence of its life. According to Dr. Taswell, one of the beneficial results to be derived from the phytolacca decandria is the gradual salivating power which it possesses in common with mercury, though by no means as dangerous. I pass over, purposely, all remedies that are derived from mineral waters or spring from the mighty deep. It is my object, in the proper place, to treat of them compared with those obtained on land.

"Oh, Nature! all sufficient! over all!
Inrich me with the knowledge of thy works!
* * * *
————Through the disclosing deep
Light my blind way: the mineral strata there;
Thrust, blooming, thence the VEGETABLE WORLD;
O'er that the rising system, more complex,
Of animals."*

Previous to packing the Cassia Ethiopica, Marylandica, &c., did the inhabitants not subjeci the leaves to the action of the sun's rays, a mouldy specimen would reach its destination, and repulsion testify to its inefficiency. Tne milky juice that flows, with quiet purpose, from the root of the convulvulus scammonia, affords the lazy Syrians a means of money-getting, and suggests a moral. Stalagmatis cambogioides, if preserved when moistened, would prove futile as a medicine. Its dried properties alone permit it to be housed for future agency in easing those afflicted with ascites, or the lamentable troubles of the brain. So necessary is it to remove all moisture from the cucumis colocynthus, that the fruit is placed in heated stoves the more surely to eliminate the water in its winding pores.

To Dr. Clutterbuck are we indebted for the original opinion, that the active principle of the momordica elaterium is to be found in the *juice* which snrrounds the seed. If analyzed with care, in accordrnce with the process adopted by Mr. Hennell, of London, before ascertaining that in 100 parts there are 40 of crystalizable elaterin, 17 of resin, (green,) 6 of starch, and 27 of woody fibre, together with 6 of a saline material, the excess of water must be dispensed with, and the pill may then be made up for those who stand in need of a most powerful hydragogue cathartic. If we look into the climatology and botanical characteristics of Cochin China, Ceylon, and Molucca, where the Croton tiglium is indigenous, whose seeds furnish an oil one drop of which is capable of acting on the intestinal canal with an undeviating influence, resulting in most copious watery discharges, we perceive that, in those countries, prolonged rains surfeit nature with abundant kindness; and the sun alternately draws out their latent strength into the acme of essential power. In the preparation of the calomelanos torqueti, which is an excellent sialogogue, we find that, besides employing mercury, sulphuric acid, and chloride of sodium, this mixture is boiled with no small quantity of distilled water. We cannot omit, while enumerating the principle lustramentra, the fact that there does not exist a practitioner who, when employing clysters, fails to accord pre-eminence to warm water. The distension produced by

* Thomson's Autumn, I. 1361.

this harmless liquid at times, saves life and brings repose to the exhausted sufferer.

In reading over the list of anthelmintics, which act directly on the worms themselves, we find cold water placed before the efficacious mucuna pruriens. Rosenstein most strongly recommends its use, at times, with salt. The judicious use of a few drops of the chenopodium anthelminticum, at times, proved salutary, and received the plaudits of admiring students.

But the oil of turpentine, obtained by distilling the juice that exudes from a peculiar kind of pine, with water, seems, at times, to prove the spes ultima of the attendant and the real remedy for the afflicted offspring.*

The fresh root of the spigelia marylandica is far superior, in its activity, in effecting permanent benefit than when, by age, its moisture has departed, and a dried remnant is the only relic of a former power.† The decoction of the melia azedareck, most truthfully styled, by the natives of the East, the Pride of India, when other efforts have been made, seems, by the inherent qualities of its bark, to produce most beneficial cures, and ease the sickly child by its narcotic peculiarities.‡

Rush§ and Warren,‖ Percival¶ and Blackall,** Maunsell and Ure, seem, from their published writings, to consider mercury as a *sialogogue*, surpassing in its power other remedies, and excelling as a means of freeing constitutions from impaired, housed-sickness, and the deleterious consequences of a poison not thus driven from the weakened frame.

Though erring on the right side, namely, a desire to wash out the poison, the great Boerhaave, "who examined systems by experiments, and formed experiments into systems,"†† believing "the venereal disease to be seated in the cellular and adipose membrane, conceived its cure was to be effected by melting down the adipose substance by salivation.‡‡" Though Falconer* opposes the excessive use of mercury, and Carmichæl† seeks to prove that half the quantity will often serve the end intended; though Travers and Ainslie, Hamilton and Emerson, Swediaur and Larrey, devote the calm result of wide experience to the energetic council, "be most careful in its usage," none of them denies its virtue, and a single outcry cannot be upheld against the moderate administration of small quantities at certain times. According to the opinions of Sydenham, in the south of France, much greater quantities of mercury could be supported in the system.

As a diaphoretic, before any internal remedy is recommended to the consideration of the medical community, we find "water applied to the surface, by affusion, general bath, vapor bath, and local applications," varying from cold, 40° to 60°; tepid, 85° to 92°;—warm, 92° to 98°; and hot, 98° to 112.°

Unsenias, in 1688, a Scandinavian of keen observation, upheld the benefical results derived from this method of cure. Wolfgang Wedel, in Jena, in 1721, and Clemens Tode, 1736—1808, of Copenhagen, strongly advocated its merits, and advised its permanent adoption.

The liquor acetatis ammoniæ, discussed at length by Phillips and Brande, Alexander and Pereira, is dispensed by the apothecary, held in solution by water; as is also the neutral saline mixture. The infusion of the Eupatorium perfoliatum as a tonic sudorific, not unfrequently alleviates the pains of rheumatism, and assists, with energetic influence, the patient sinking under the aggravated symptoms of typhoid pneumonia. As an expectorant, hot water or steam is suggested as one of the most efficacious means of relaxing the congested vessels, favoring secretion and exudation, and soothing a highly inflamed region. By perusing the works of the learned in experience, we cannot fail to be struck with the fact that opium, paregoric, balsum of Tolu, polygala senega, and the balsam of the myrospermum peruiferum, when administered, depend for aid upon the direct action of water, hot or otherwise. Before nitrate of potash can be used, it must be boiled in water as a certain means of cleansing it of all impurities. According to the opinion of Dr. McLean, the infusion of convulvulus panduratus may be ranked among the best diuretics. By carefully analysing the exact composition of the volatile oil of the juniperis communis, the following is the result:

* See Dr. Brande's views on this subject.

† This fact has been endorsed by Dr. Gardner, after much experience, the supervision of many cases, and a thoughtful comparison.

‡ Salt, dissolved in water, has been strongly advocated by Heberdeen and Brera, Rush and Barton, on account of its own tonic character.

§ Obs. and Inqs.

‖ View of Mercurial Practice in Febrile Diseases.

¶ Percival's Essays, Vol. II.

** Blackall on Dropsy.

†† Johnson's Life of Boerhaave, Vol. XII.

‡‡ Inaugural Dissertation on Mercury, embracing its medical history, curative action, and abuse in certain diseases, by John W. Francis, A.B., New York, 1811.

* Transactions of the Medical Society of London.

† Essay on Venereal Diseases.

Volatile oil, ...	1.00
Wax, ...	4.00
Resin, ...	10.00
Sugar, with acetate and malate of lime,	30.80
Gum, ...	7.00
Lignin, ...	35.00
Water,*	12.90

The decoction of the apocymim cannabinum is by far the most superior preparation of this herbaceous plant, seeming, as it were, to eliminate the fluids resulting from a dropsical tendency; so, also, is the decoction of the leaves of the arbutus uva ursi.

The infusion of the pareira brava, and the watery extract of the chicocca recemosa, possess the qualities of the other forms without seeming to loose any of their specific properties. Without pursuing a tedious routine too practically tiresome to be remembered, it is sufficiently to the purpose for me to state that in the list of emenagogues, parturients, sedatives, particularly demulcents, narcotics, stimulants, and tonics, water is represented in the most powerful light, in one case, as a means of obtaining the medicine, in another, as the best vehicle in administering it; again, as forming one of its principle constituents, and, finally, as the kind agent which intervenes, alleviates, assists absorption, brings about solution, and allays great suffering.

There exists few whose active minds will furnish them with permits to descend into the labarynthian caves where science dwells in primitive simplicity. Their thoughts dwell on enlarged realities, and cannot stoop to the details of practical beginnings. Others scoff at such labor, as conducive in no way respecting profit for the loss of time, and only seek to cure disease, so much per hour, with determined zeal exacting payment for what was accomplished by Divine agency alone. Of such the type may be perceived in this rude emanation, from an honorable source:

> "With just contempt Hygeia didst thou see,
> These mean dissensions of the faculty;
> See sick'ning physic hang her pensive head,
> And what what was Science once, become a trade:
> Behold her sons desert her mystic lore,
> And study nature less, and lucre more."

In the early days of England's medical schools, even the first apothecaries, J. Falcand de Luca,† 1357, Pierre de Montpellier,‡ 1360, and John de Gaddesden, the latter appointed physician to the Court, saw fit to penetrate the hidden veil of truth. They studied axioms and analysed the most accepted aphorisms. But a hurrying world no longer looks on trifles. The present must become the earnest of some future recompense, else a theory is laid aside, and well-established certitudes stand forth the rich rewarders of acknowledged industry. To him who seeks for treasures where the money-thinker is not found, this principle is innate, and the pleasing thought—

> "Oh! nature is perfect wherever we stray;
> 'Tis man that deforms it with care.*

unfolds the secrets of revealed realities, and urges on the mind to grapple with a startling power, all that may spring up for useful purposes. It was this that brought before the scientific world the genial thoughts of Humboldt, and rendered Linnæus a synomin for concentrated perseverance and untiring zeal. No idle curiosity formed any of the compound essences which created such mighty geniuses, and taught mankind to think.

In the long list of the nourishing products of the fertile soil, few furnish at the same time a pleasant repast, satisfy both hunger and thirst, and act as a mild diuretic, in comparison with the water-melon.† In regions where the nature of the ground, and the absorbing properties of the sun.hot rays parch up the thirsty land, this reservoir of water still remains to sooth the care-worn traveller, and refresh the weary pilgrim. According to the learned Hasselquist, in Egypt the inhabitants employ it as not only meat and drink, but for the purpose of physic. The water-zizania,‡ which may be found with its beautiful leaves of purplish green, and stalks terminating in panicles of flowers, claiming both the sexes, in the extensive swamps of Jamaica and Virginia, is preferred by many Indians to the universal rice so easily obtained, so readily prepared for palatable purposes. Whether we partake of apples, peaches, the ribes rubrum, or the ribes grossularia; the prunus avium, or the dracunculus aquatilis; whether summer season is revived in our minds by the fresh taste or the melo-vulgaris,§ or the delicate flavor‖ of the pyrus communis, one or all are doubly grateful from the juice of their rich luciousness, which, acting on pure principles, sprung from the water in the ground, and

* Lectures on Materia Medica and Therapeutics, etc., by John B. Beck, M.D.

† Regnar. Ant. Bened. in Angl. ‡ Freinds' Hist. Med., Tom II.

* Schiller's Bride of Messina, translated by A. Lodge. Esq.

† Cucurbita citrullus, Lin. Sp. pl. 1435.

‡ Zizania Aquatica. Lin. Sp. pl. 1408. Arundo altagracilis, foliis e viridi cæruleis locustis minoribus. Sloane's Fam. 33, Hist. 1. p. 110.

§ Baub. Pin. 310.

‖ Bryant's Hist. of Esculant Plants, London, 1783.

in accordance with a poet's* calm experience of nature's course:

"The merry sap has run up in the bowers,
And burst the windows of the buds in flowers."

In minutely investigating the conformation and rapid growth of vegetables, and especially those of a fungoid character, we readily perceive to what unbounded limits the necessity of water holds possession of their very size and capabilities of a prolonged existence.

Whether we examine the careful structure of exogenous trees, or become enamored of the telescopic certainty of shape, beautifully mentioned by DeCandolle, whether we agree with Darwin in his theory, that "each bud is a distinct individual plant," or closely trace the medullary rays which "radiate from the pith to the circumference"† of some plants, it makes no difference. In our steady course we meet with water in the form of sticky gum, more usefully consistent in the character of sap, with equal benefit, and slow ascending movement as a milky juice, for many purposes; yet never idle, ever busy, ever pure, and unassociated with an objectless pursuit.

"Labitur et labetur in omne volubilis ævum."

To be Continued.

Spontaneous Rupture of the Abdominal Walls, with Remarks on the Recuperative Powers of Nature.

By A. G. Walter, M.D.,
Pittsburgh, Pa.

A report of the following case, being similar, with regard to the cause of injury and extent, to the one published by Dr. Edward Batwell, in the Medical and Surgical Reporter, page 533, cannot fail to be of interest.

Mary Grede, 72 years of age, of Pittsburgh, mother of twelve children, of delicate frame, yet healthy constitution, had enjoyed good health, with the exception of a bronchitic cough of more than twenty years' duration, subsiding during the summer, but regularly returning with the approach of the cold season. For the last two years, the cough had been more troublesome, and expectoration of a viscous fluid more copious. A month or two ago, the paroxysms of coughing had become very severe and frequent, lasting for several minutes. She had been her own doctor, and continued to administer to herself, though the cough assumed a spasmodic character with attacks of more than half an hour's duration. Thus afflicted, her appetite began to fail, and her strength to leave her. On July 16, 1860, we were hastily invited to see her, and found her in the following condition. Resting on her bed in a half sitting posture, she complained of agonizing pain in the abdomen, which showed a wound of four inches long in the linea alba, through which part of the omentum and small intestines, already inflated with gas, had protruded. Her features were sunken and pinched, pulse small and rapid, surface of body cold and clammy, cough had ceased, but restlessness, and a craving thirst for cold water, with vomituritions and vomiting were present. During a fit of coughing, which had lasted for more than half an hour, previous to our seeing the patient the abdominal walls from below the umbilicus had given way with hardly any bleeding; skin, fascia, and peritoneum being ruptured to about the same extent. With some difficulty, owing to the distended condition of the intestines, the protruded mass, exceeding the size of a child's head one year old, was reduced. The lips of the wound (including dermis and fascia) were united by silver wire, with quilled suture, strips of adhesive plaster encircling the whole abdomen between the stitches, and a flannel bandage around the whole with lateral compresses constituting the outer dressing. The abdominal muscles at the same time were placed in a relaxed condition by bending the hips and knees, and raising the shoulders. Brandy and water in teaspoonful doses were given with opium gr. ij. at once followed up by gr. j. every half hour; warmth to the extremities having been applied. Six grs. of opium having been taken, and the vomiting not subsiding, morph. sulph. gr. one-quarter every two hours was substituted, when vomiting and restlessness ceased, the patient continuing in a comfortable condition with entire absence of pain, tympanitis and cough. The pulse, gradually losing its frequency, became firmer, and the natural temperature of the skin returned. Secretion of urine being free, the bladder was relieved daily three times by the catheter. Sleep too was refreshing, but thirst was urgent, which had to be allayed by iced-water and pieces of ice. This treatment was continued without interruption for a week,

* Lines written on a burst of fine weather in May, by Leigh Hunt.

† Animal and Vegetable Physiology, considered with reference to Natural Theology, by Peter Mark Roget, M.D.

nourishment in teaspoonful doses of ice-cream, brandy and water and beef essence alone being allowed, and no untoward symptom having appeared, morphine was administered at longer intervals. Union of the wound had taken place in a week, but the stitches were not removed till two weeks later, when the patient left her bed, the abdomen being only supported by a flannel bandage. Morph. was now omitted, the health of the patient being better than before the accident. The alvine evacuations were brought on by warm water injections on the tenth day. The cough, however, gradually returned, though in a milder form. She is living yet, and in good health.

Recoveries from such injuries (as well as the successful results which ovariotomy and other severe operations, implicating the large cavities and articulations, in more recent days have attained) have been sufficiently frequent to warrant the conclusion that the recuperative powers of nature are fully competent to repair grave injuries, at any period of life not excluding advanced age, provided the *nervous system* be *timely* and *properly* guarded by the judicious use of anodynes, and the digestive organs sustained by nutritious and stimulating agents in upholding life and its recuperative resources. Under the genial influence of anodynes in the shape of opium and morphine, etc., suited to the idiosyncrasies of the patient, but *powerful* enough in their dose for *completely* relieving pain, when given at *once* after the receipt of any severe injury, more especially of that to the peritoneum, pleura, and larger joints, and cautiously continued, inflammatory attacks of the injured tissues will be prevented, while nature is left free and unimpeded in her ever ready efforts to agglutinate torn or divided surfaces and remove congestion and effusion.

Pain being the earliest and first monitor, the ever faithful sentinel and inner voice by which an injured organism appeals for relief, thus indicating not only the locality of the injury, but also its extent and severity, which, if not *checked at once* will lead to inflammation and disorganization—no time should be lost, not only to *arrest* it *speedily*, but even to *avert* it by the prompt use of anodynes suited to the particular case. To allay pain in surgical ailments is an imperative duty, much more urgent than in medical cases, as the former are generally more sudden and severe in their invasion, and more rapid in their destruction, than most of the diseases which come under the province of the physician. If this will be admitted, the necessity of preventing the invasion of pain with its concomitant evils, which are sure to follow grave injuries, cannot be questioned.

When, with the aid of anæsthetics an otherwise painful operation can be made painless, and with the prompt and judicious administration of anodynes, pain and its numerous untoward consequences can be averted, how much more glorious and successful will be the office of the present surgeon than that of his predecessors, and how thankful mankind ought to be for these blessings.

But the exhibition of anodynes after operations or severe injuries, though often resorted to, has not, we believe, received that degree of consideration which its importance demands. To guard an organ or member against the ravages of severe accidents, the *invasion of pain*, we plead, *should not be waited for*, but anodynes should be given at once, in suitable doses, and continued till all danger of inflammation has passed. The ordinary doses of these agents seldom accomplish the desired object of blunting the nervous system, and inducing that repose of its centres (not unlike the mesmeric sleep) so essential for recovery. The greater the injury, and the more severe and protracted an operation, the more excited and irritable the nervous system of the patient, the stronger is the necessity of a full and even unusual dose of the remedy for producing tranquillity of the nervous centres. Whoever has watched the effect of large and repeated doses of anodynes, under these circumstances, will have been astonished to have witnessed the soothing effect of these agents on the nerves, without inducing that comatose condition, which smaller doses, given under ordinary circumstances, or in the healthy condition of the patient, are apt to produce. It seems as if the nervous fibres, strung to their utmost by the shock of an accident or operation, absorb an enormous quantity of anodynes, and even require *such an amount* for their pacification and relaxation, that the remedy being totally absorbed, no toxical effect follows.

Unusually large, however, as the quantity of an opiate will need to be in particular cases, if the desired effect is to be attained, the greatest watchfulness, nevertheless, is to be exercised on the part of the surgeon to prevent the approach of collapse, ushered in by sinking of pulse, vomiting, coldness of the surface of the body, and clammy perspiration, &c., which may

prove fatal. Yet, with that understanding, no danger may be apprehended from the free administration of a remedy in doses sufficient to protect the system from the inroads of the most severe injuries, which, under its influence, will be repaired with as much rapidity as those of minor importance.

So thoroughly are we convinced of nature's inherent power of repairing the gravest injuries, that *failure* of success ought not to be attributed to insufficiency in her resources, but to the too excitable, weak, and irritable condition of the nervous system of man, perverted as it is, and alienated from the normal standard of health by faults of his moral, physical, and intellectual education. Why is it, we are constrained to ask, that in the brute creation, nursed, reared, and living according to nature's laws, the severest injuries of the large cavities pass off harmlessly; that accidents, befalling them with impunity, are mostly fatal to the human race? Can any better or more satisfactory reason be assigned than that to be found in the strength, tranquility, and natural condition of the nervous system of animals, not vitiated, as it has been in man, by the natural customs and habits which he has adopted, and continues to foster in the face of nature's daily injunctions? Why is it that vulnerability in animals should be so insignificant compared with that of man? Composed of the same materials, and possessed of the same tissues and organs, can any other cause be ascertained for the difference of tolerance of the system against injuries between animals and man, but that healthy repose and vigor of the nervous centres in the former (their natural protector,) free from all morbid excitability and irritability, which are working man's destruction—a condition solely induced by his utter disregard of nature's laws—which civilization, with blessings, though great and numerous, has bequeathed to him. With an intellect towering to heaven, he is daily and unrighteously working his own physical dissolution. No wonder then, that disease, infirmities, and injuries, destroy his usefulness long before his mission is accomplished, for want of that strength and health of his nervous system allotted to him by his Creator, but which he has lost by faults of his own, while it remains normal and imperturbated in animals.

To restore to man the primitive and natural standard of health of the nervous centres, under whose protection disease and injuries would lose their terror, is impossible in the present condition of mankind, but we feel proud to acknowledge, that with resources in our power, if properly appreciated and applied, this fault of the nervous centres, (either being inherited or induced by man's own imprudence,) manifesting itself by weakness, excitability, and irritability, which so much endanger the safety of those afflicted with injuries and prostrated by operations, can, in most instances, be temporarily, at least, corrected, so as to enable the patient to bear up under them, when otherwise they would prove fatal. To prevent *pain*, therefore, in the treatment of surgical cases should be the surgeon's assiduous aim, as immunity from suffering is one of the patient's greatest safe-guards. For without pain there will be no congestion, no inflammation, and, consequently, no danger. With the absence of pain, the nervous centres being undisturbed, nature's work of reparation goes on speedily and uninterruptedly to recovery.

Though limited as our opportunities for observation and experience may have been, yet as a close and watchful student of nature, the following conclusions have forced themselves upon our mind as correct and tenable:

1. That nature in her wisdom, as a weapon of defence, has implanted in all created, a recuperative power co-existing with life.

2. That the normal strength and the natural tone of the nervous centres is the only stronghold of the recuperative capacities.

3. That the nervous power in a purely healthy condition exists only in the brute creation, living according to nature's laws, hence its small degree of vulnerability.

4. That weakness, morbid irritability, and undue exaltation of the nervous system, inherited or induced by faults of the moral, physical, and intellectual education of men, engender disease, make accidents fatal, operations dangerous, and increase the vulnerability of men.

5. That as restoration of the nervous system to the natural standard of health is hardly attainable, science, in her progress has enabled her votaries to strengthen the weak, and to calm the excited nervous centres by the help of anodynes, so as to place the recuperative powers of nature, at least, temporarily in as near a healthy condition as possible.

6. Various, however, as the grades of debility and morbid exaltation of the nervous system, will be found in different individuals, the customary doses of anodynes will seldom be sufficient for producing the desired effect. Large

doses given at once, suited to the particular constitution and condition of the patient, and cautiously continued, will be required in most instances. To subdue the excited and morbid state of the nervous system is, therefore, the great desideratum in the treatment of surgical cases.

7. That the invasion of pain, the precursor of congestion and phlogosis, with its dreadful results, after accidents and operations, should not be waited for, but soporifics should be given *at once* with the view of preventing pain, and persevered in till all danger of inflammation has passed.

8. That the digestive organs at the same time should be judiciously sustained by nutritious, tonic, and stimulating agents, so as to enable them duly to prepare and properly to assimilate the pabulum vitæ.

9. That thus protected and fortified, nature (the efforts of man's own constitution) will seldom fail in her resources of restoration, and that the most severe injuries and frightful accidents will often be repaired with astonishing rapidity and wonderful perfection.

The Antrum of Highmore and its Diseases.

By Jas. E. Garretson, M.D.,
Of Philadelphia.

Diseases of the Mouth—*Continued.*

A purulent condition of the secretions of the antrum may be viewed somewhat as one would view a gonorrhœa or an ozena; indeed, Mr. Bell, the English author, goes so far as to describe the conditions as being similar. "Both diseases," he says, "consisting equally of an altered secretion; in the one, of the pituitary membrane, and in the other of the muscular lining of the uretha, which, in neither instance, possesses any of the characteristics of abscess, though the matter in both is purulent."

Certainly, if we allow for some differences, as influenced by cause and location, the description of the one would very well answer as the description of the other. In both we have the same perverted secretion, the same molecular change, the same sthenic and asthenic modifications.

As a gonorhœal discharge is always preceded by certain inflammatory conditions, and, as after the subsidence of the acute attack, the discharge may long continue profuse, or, on the contrary, may decline to a scarcely perceptible minimum; so, in antral purulency, must we have the associated inflammation, and we may have the profuse or limited secretion.

In antral diseases, however, as may be readily inferred, very much depends on the nature and associations of the secretion. A profuse discharge, with closure of the orifice of the cavity, must necessarily entail the most untoward consequences; the walls of the cavity will attenuate until (unless surgically relieved) the weakest point will give way, the rupture being most apt to occur, either within the orbit, or the mouth. Not unfrequently, however, this weakest portion seems to be the canine fossa, and the opening has occurred at the tuberosity. My own experience, however, would lead to the inference that the hard palate is, by far, the most common point at which the matter seeks egress. You will see a tumor bulging out from one side of the mesial line, and which advances more or less rapidly, until fluctuation becomes very distinct. A sign diagnostic of this class of tumors, as I have had occasion to observe, is, that its internal boundary is apt to be quite abrupt, and does not pass the line midway to the mesial division. The establishment of a fistula relieves it at once of the sense of distension, and if it has formed in a convenient place, as within the mouth, the patient may feel disposed to congratulate himself on having come to a sufficient cure. Unfortunately, however, in the majority of cases, this satisfaction is of short continuance; for, independent of the fact that the disease at once takes on the chronic form, making the sufferer an object of disgust to those with whom he is brought into immediate contact—the fetor of the discharge, under some circumstances, being really unbearable. Yet, also, is the undue retention of the secretion within the cavity such a source of irritation to the parts, that, not unfrequently, the most serious lesions result. In some instances, the whole of the bones of the face being destroyed.

The causes influencing retention of these secretions are two-fold: First, the external wound is apt to heal, and to continue impervious until an increase of the secretion induces sufficient pressure to cause its absorption, as in any case of abscess. In the second place, the passage is blocked up by floculi within the cavity.

Puruloid secretion in the antrum may, from the onset, be of so limited a character—that like secretions in certain of the ovarian cysts—

years may pass before marked inconvenience results. I am acquainted with a case—that of Mr. C——, late an eminent merchant of this city, in whom, after five years of great mental and physical suffering, a disease of the antrum, supposed to be malignant, was found to be nothing but simple muco-puruloid engorgement depending upon a dead tooth. In this case the trouble had commenced with a feeling of heaviness and oppression in the body of the jaw; the parts had gradually enlarged until there was a distension of the cheek to the size of a large fist, the eye finally being thrown entirely out of position from the rising of the roof of the antrum. Much treatment had been given the case without the slightest accruing benefit. No attention, however, had been directed to the dental arch—the teeth, although the patient was sixty years of age, being apparently in the most perfect condition.

The result of this case was the diagnosis, on the part of a surgeon to whom he finally applied, of a dead nerve in one of the bicuspid teeth, the organ, although as healthy looking as any of its fellows, responded to the stroke of an instrument in the manner as described in the paper on alveolar abscess; this tooth was extracted, and in six months the patient was perfectly restored.

A circumstance connected with the extraction of the tooth in this case, offers an example of practice in this direction, of which it is well not to loose sight. The practitioner who related to me the circumstances of the case, informed me that he expected to find associated with the tooth fang a pyogenic membrane, and to have the extraction followed by a gush of pus, in both of which, however, he was disappointed. The fang was clean, and the blood which followed the operation had nothing peculiar about it. Not to be thus balked, he passed a probe up the alveolus of the extracted tooth, which, meeting a resisting, yet yielding body, he pushed through in the direction of the antrum, and into which cavity, with some little effort, it was made to pass; the withdrawal was followed by a profuse purulent discharge. This resisting body may be simply floculi, as alluded to, or it may be the mucous membrane proper to the parts—most likely it would be found the latter, for we are to remember that it is not alveolar or antral abscess with which, in these cases, we are dealing, but simply what might be termed a mucitis, and, of course, a break in the continuity of the membrane csne notia essrily to be looked for. The practitioner, in this case, only approximated to the exact condition; he thought, evidently, that the trouble was tooth abscess discharging itself into the sinus, whereas (while the treatment was perfectly adapted to the requirements,) yet the case was one of simple mucous, or muco-puruloid engorgement, the result of reflected irritation.

The diagnosis of mucoid and puruloid engorgement of the antrum, is, as a rule, not difficult to make out. At first there is inflammation, and this, as suggested, is most likely to have an origin about the teeth; symptoms of catarrhal trouble in the schneiderian membrane present, the result of its continuity with the affected parts, more or less mucous, or it may be puruloid matter is passed from the nares of the affected side. This, as the trouble advances, ceases, and the patient begins to complain of a sense of heaviness about the body of the cheek. If the secretion is active there will be much pain, sometimes sharp in character, but more frequently heavy and unbearably dull. In all chronic periodontal inflammation we have this same dull pain, but then it differs from the pain of engorgement in being confined to the alveolar arch; in this latter trouble the greatest pain is found, I think, associated with the floor of the orbit, which, as will be remembered, makes the roof of the antrum. At length, as the secretions accumulate, the parietes of the cavity begin to attenuate and expand. The tumor now forming may be distinguished from others—firstly, by the history of the case, secondly, by dryness of the nares of the affected side, the result of the closure of the orifice of antrum; thirdly, by the gradual and regular enlargement: fourthly, by the non-association of the integuments of the cheek; and, fifthly, by the fluctuation which it will finally yield.

To treat successfully such a trouble, we have only to search out the source of offence, and, where it is possible, remove it. If this should prove to be a tooth, we may secondarily treat the antrum through the alveolus. Where the trouble is thus of strictly local origin, we shall find that we need to do very little more than to employ daily some stimulating injection: diluted tincture of iodine is a favorite with me. Where the acrid character of the retained secretion has provoked degenerating ulcers, I have obtained the very happiest effects from weak injections of chloride of zinc.

If, on the contrary, such bad conditions of the antrum be associated with constitutional

causes, I need not suggest that such causes must have our attention. In these latter cases, however, where the cure promises to be tardy, we may give to a patient complete relief, locally, by making an opening into the antrum, and keeping it patulous by means of a cotton tent; this, combined with the daily employment of such injections as may seem indicated, will be found to yield most decided benefit.

Concerning abscess proper of the antrum, I think it may be set down as the rarest of rare diseases. Bell and Bordenhave each mention a case. I have never met with an instance. Abscesses, described so frequently as occurring in this cavity, will, I think, commonly be found to have their origin in the alveolar border, and if treated as any ordinary case of alveolar abscess, will at once succumb. See papers on Alveolar Abscess, and Anomalies of Dentition.

To be Continued.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

Service of Dr. J. F. Meigs.

Wednesday, October 9, 1861.

PLEURISY.

This case relates to a sailor, twenty-eight years of age, admitted October 1st; just returned from a voyage to Key West, Florida, in a barge loaded with coal. Left this city about the middle of August; after continued exposure to stormy weather for several days in succession, he was attacked with a severe pain in his right side, with some cough; still kept at work for about two weeks, and when at Key West, took no medicine. Cough continued only two days, dry, with rattling, but no expectoration and slight difficulty of breathing. Started for home on the 7th of September; pretty good health; soon after arrival was again exposed to wet, from cleaning the vessel, and was again taken with a very severe, "*dead* pain," as before; had dry cough, and, on Saturday previous to admission, vomited some blood. When admitted to the hospital had some fever; dullness of percussion, both before and behind, on the right side; no crepitation, slightly marked friction; percussion in horizontal and erect position showed a marked difference, lower half being dull, upper half more resonant, indicating effusion. Pulmonic resonance on left side is well marked; vesicular respiration very feeble and dull in right side, but not so dull as it should be if there were great effusion; he has what authors have termed vesiculo bronchial respiration, as indicated by auscultation and percussion, rather than by particular symptoms; this is a case of latent pleurisy, which has resulted in slight effusion. For four days after he came to the hospital he took the following prescription: golden sulphuret of antimony, ¼ grain; Dover's powder, 2 grains every two hours; a blister was also applied to the affected side. Finding that he was quite weak, and suspecting some malarial origin, as he had recently left the south, I ordered him 8 grains of quinine, and 15 drops syrup of iodide of iron three times a day, and omitted the antimony. He was also placed upon good diet, and is improving.

I have often thought, gentlemen, that some of these cases of latent pleurisy might be rheumatic in their character.

CHRONIC DIARRHŒA.

Jacob F——, a Norwegian seaman, aged thirty-eight; one year ago, as his vessel was taking in water, one of the tanks became broken, letting in salt water, in consequence of which all the crew were taken sick, and he then contracted this diarrhœa. On the 7th of July he was admitted to the hospital, was discharged, and three weeks ago was again admitted. The discharges were then six a day, lightish in color, and semi-fluid in consistence. In my view this case is one of chronic catarrh. Catarrh is not confined to the chest alone, it may attack the digestive organs, and exhibit in the discharges of cholera and other diseases its peculiar characteristics. In its treatment diet is of vast importance. Indeed it is of no use to give drugs without a careful and close attention to diet. I cannot urge upon you too strongly the importance of this matter. The diet must be carefully regulated. Milk, bread, crackers, beef tea, rice, etc., are proper articles to be used. This man, in addition to diet, has taken one-twelfth grain morphine, 1 grain quinine, and two grains of sulphate of zinc three times a day; and in addition has had an injection of 12 grs. nitrate of silver to the ounce of water. Under this treatment he is improving, and his evacuations are now only twice in the 24 hours.

JEFFERSON MEDICAL COLLEGE.

Wednesday, October 9, 1861.

Service of Dr. S. D. Gross.

ONYCHIA MALIGNA.

Jane W——, a child, presented by her mother for treatment for ulceration of thumb, resulting from an external injury. The affected part is much larger than natural; truncated, greatly discolored, tumefied, the edges are jagged, and have a peculiar dark hue, and the discharge is fœtid and sanious. The ulcerating

process has extended till the nail, and probably one of the bones of the thumb are entirely gone. The child is, up to this time, healthy, appetite a little variable, bowels regular, no known constitutional taint; still the pulse is slightly irritable, sharp, showing that the constitution, though not yet seriously affected, begins to sympathize with the disordered member. This affection is most common in young children, and frequently comes on without any assignable external cause. It may partake of a strumous character, though here I must speak guardedly, for the question is not yet fully settled.

In the treatment of such cases, sarsaparilla, which is said to possess wonderful remedial properties, is entirely inert and worthless; indeed, the article has no remedial properties whatever. In this case the treatment will be: Calomel, 2 grs., jalap, 3 grs.. given with a view to purge the child well, and to act upon the secretions. Purge it well. It must have no meat for some days. It may have bread, crackers, milk, etc., but *no meat.*

As a constitutional remedy, and the only one upon which any reliance can be placed, give the child one-fifteenth of a grain of bichloride of mercury three times a day. I would bring the system gradually under the influence of the mercury, but not carry it to the extent of ptyalism; if the gums become a little touched it will do no harm.

As a local application, the slippery-elm poultice, medicated with a solution of two drachms sugar of lead, half drachm of laudanum, and half pint of water.

As a direct application to the ulcerated part, take four drops nitric acid to the ounce of water, moistening a little lint with it. The hand should be kept in a sling and not suffered to hang down.

CHRONIC ABSCESS OF LEFT NATES.

Charles W——, twenty-four years of age, a comb-maker, has a swelling upon his left nates; commenced in June last, and has been increasing since; it is now ten or eleven inches in diameter; no assignable cause for its appearance. It fluctuates very distinctly, is very elastic, is not hard, sometimes pain above it: beating, jumping pain; there is a little preternatural heat; the subcutaneous veins are slightly enlarged. There is no general fever, no cough, the appetite is good, and all the functions of the body seem to be well performed. It is not a tumor, for a tumor hardly fluctuates as this does; it is not an aneurism—there is no pulsation; it is too soft to be encephaloid; it is not hard enough for a scirrhus; it is not malignant; what is it? I conjecture it to be a chronic abscess, strumous, scrofulous, or tuberculous, and to test my diagnosis, I will introduce into it this exploring needle, which, you observe, gives exit to pus.

To lay this abscess open would produce severe constitutional fever, the introduction of air into it tending to produce disorganization of the tissues, decomposition and putrefaction. The constitution has not yet been molested or disturbed, it is important that it should not be. Here is a distinct cavity, formed from the coagulating lymph of the blood. It is a secreting surface, organized with blood-vessels, and circumscribes and forms a wall around the abscess. To avoid the rigors, chills, and constitutional effects which would result from a free opening into it, I shall make a valvular incision, by which the air will be excluded. After the exit of the contained matter, compression may be used to bring the walls of the sac together, and obliterate the cavity; if stimulants be necessary, use iodine one part to six parts of water, or a seton may be passed from one side of the cavity to the other.

SEBACEOUS TUMOR OF THE FOREHEAD.

John W——, seventy-two years of age, has a soft, semi-fluctuating, detached, non-malignant tumor upon his forehead, between his eyebrows, of some twelve years standing. It is cystic, an enlargement of one of the sebaceous glands, the duct of which, from some cause, has become obstructed. As a consequence, the fluid secreted is retained; irritation ensues, the walls of the cyst become thickened, expanded, hypertrophied by the expansion. The remedy is excision. On cutting into them, we find the contents to be of the consistency of tallow, and sometimes very offensive. These tumors are sometimes multiple, and usually occur about the face and scalp, never upon the legs or hands.

ANEURISM OF THE POPLITEAL SPACE.

John R——, lumberman, thirty-five years of age; three months since, as he was loading his wagon, he felt something give way in his right leg, and in an instant almost, there came up this tumor, which has remained about the same size since. It is attended with very little pain. The tumor is elongated, ovoidal in shape, circumscribed, no discoloration. On applying the ear, we discover, faintly, the bellows sound of the aneurism; pulsation is distinctly observed; by compressing the femoral artery the pulsation ceases. The tumor is then an aneurism of the popliteal artery, occasioned by a rupture of its walls.

The treatment we shall follow in this case will be that of compression, by forced flexion of the leg upon the thigh, and securing it firmly in that position. This method of treatment

was first suggested by Mr. Hart, of England, and can be used with better prospect of success in small tumors than in large ones. The objection to it is the length of time it takes to effect a cure. This case will come under our notice again.

Oct. 12, 1861.

SCIRRUS OF THE MAMMARY GLAND.

Mrs. M——, fifty-six years of age, married, mother of nine children, youngest of which is fifteen; has been in good health all her life. Twelve months ago first appearance of the swelling of her right breast, which has been slowly growing since; knows no cause for it; nipple is retracted; gland atrophied; no discoloration of integuments; hard, almost like bone; pain not constant, but lancinating, darting; tumor now movable, circumscribed; by and by lymph will be poured out, and it will become attached; the lymphatic ganglia are also involved, and there is some swelling above the affected breast, near the arm-pit. Whether the cancerous matter is carried to those glands by the circulation of the blood, and deposited as tuberculous matter is said to be deposited in the lungs, is yet a mooted question. Here, then, is a well marked case of scirrhus of the mammary gland, or hard form of carcinoma. The prognosis is always unfavorable. It may recur again, though not perhaps for some years. The remedy is excision, and excision of the entire gland. Not a vestige of it should be left. Young surgeons have sometimes failed in undertaking to save a portion of the gland, and a recurrence of the scirrhus is most certain to follow. The excision should be complete.

HYDROCELE.

Wm. S——, two years of age, pale, feeble in appearance; not healthy; presented on account of a swelling of some seven months standing occupying the left half of the scrotum; spermatic cord natural; some enlargement of the subcutaneous veins; the tumor is tolerant of manipulation; fluctuation distinct, has not subsided since it first began; is attended with no pain. If it were hernia it would be reducible in the decumbent position, whilst it might return again as the patient rose up; it would be softer and have more of a doughy feel, and there would be no fluctuation. We, therefore, conclude it is not hernia. It is not malignant for children are not liable to such diseases in that locality; it is not encephaloid. It is simply hydrocele, or a collection of serum in the tunica vaginalis, which may be the result of inflammation, or as in this case from no appreciable cause. The treatment for hydrocele is opening the sac, by means of the trocar to to draw off the water, and the application of tincture of iodine one part, water six parts, by means of a camel's hair pencil to the exposed surface. The object being to provoke inflammatory action sufficient to glue together the contiguous surfaces. Tnere is no danger from this treatment. The iodine is in the right proportion to effect the object in view, and no more.

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

Doctor Daniel Ayres, President.

September 24, 1861.

CASE OF A PECULIAR TUMOR OF THE RIGHT BREAST—UNCERTAINTY OF DIAGNOSIS.

The case relates to a lady, forty-one years of age, of good constitution, regular in her catamenia, and without any hereditary disposition to cancerous growth. The said tumor had first been noticed two years ago in the shape of a small pea, and its cause ascribed to an accidental blow by the elbow. From that time it had gradually developed to the size of a black walnut, was distinctly circumscribed, firm, even, and movable. The integuments were not discolored, nor adherent to the tumor. Its seat is in the upper portion of the right breast exterior to the mammary structure. It does not alter the form of the latter, nor change the position of the nipple. The neighboring lymphatic glands are perfectly free from disease. The tumor had caused but little inconvenience to the patient, and at no time severe pain. Its removal was requested and performed. The specimen, together with an exquisite copy in wax, were then laid before the Society, and the peculiar color and rough structure of the same noticed. At the first glance it seemed to be a hæmorrhagic clot of some duration and enclosed by a firm capsule. On more minute inspection, difference of color and composition was observed.

The former was brownish-red not unlike mahoghany of a dark hue. Lighter parts could also be discerned. And as to the gross anatomical arrangement five divisions were noticeable, separated by interstitial material. The tumor protruded slightly from the capsule when midway divided.

A microscopic examination of the tumor, both in its recent and prepared state, (with chromatic potash,) Dr. Bauer had observed crenated blood corpuscles, dark points like changed hæmatine, but he had also found numerous cells of moderate and almost inferior size, and conical in shape, some of them containing dark material. The intercellular material was scantily fibrous. He thought these cells did not resemble epitthelium of the lacteal ducts, unless much changed in appearance and contents, nor did the tumor comprise a part of the glandular structure of the mamma, which had been

evidently pushed back, and the growth increased by juxtaposition. On the other hand, it certainly did not manifest a distinct carcinomatous character, belonging to the species of melonatic tumors. He was at a loss to classify it, but had his misgivings as to prognosis. The wound, as yet, did not indicate the return of the tumor, although it was about closing.

Dr. Daniel Ayres had also made an examination of a specimen furnished him from this tumor. He considered the growth as essentially fibrous in its character. The cells referred to by Dr. Bauer, did not appear by any means pathognomonic of malignancy. Their chief feature was derived from the contents, which appeared to be pigmentary granules. His opinion of the tumor was based upon its clinical history and anatomical aspect. Whilst the former certainly did not favor malignancy, the latter was best appreciated by comparing it with a specimen of well-known cancer of the breast then on the table. In the latter, the diseased mass, on section, was situated on a level with the adjacent structures, and when closely examined, this surface was found to be even slightly concave. Its close connection with the tissue in which it was imbedded, gave the idea of infiltration, and the entire absence of anything like a capsule. In strong contrast with this condition, the tumor under discussion, stood boldly out from its surroundings, and could be readily enucleated by the finger-nail from the dense capsule which invested it. This specimen strongly resembles a growth which returned upon the cheek of a lady, at the seat from which and encysted tumor had been removed some month previously by himself. It was again removed without recurrence, and appeared to be made up of fibrous structure and degenerated blood cells. It was therefore supposed to have originated from the blood-clot left in the wound after the first operation.

The history of this case, already given, furnished us a similar condition following a blow, and consequent interstitial hemorrhage. This had become encysted, a portion of its contents organizing whilst other parts were undergoing degeneneration and absorption.

Dr. Willets'

Case of Extensive Cystic Degeneration of the Kidney in a Young Child.

The doctor exhibited to the Society the kidneys of a young child, whose autopsy he had made a few days previously. The patient was a boy about six years of age, who, though delicate and unhealthy from birth, had never suffered from any acute sickness. Four or five weeks before death, it was observed that his abdomen began to be distended with water, and feet and ankles to become œdematous. The urine was examined and found to contain a moderate quantity of albumen. Mild diuretics and tonics were administered to the child, which were effectual in removing the dropsical accumulations. The patient, however, soon yielded to his disease, and died with cerebral symptoms.

In both kidneys, the cysts were very numerous, and compared with the size of the organs, very large. They varied in size from that of a pin-head to that of a marble. In the right, the cysts were greater in quantity, and larger than in the left. The left which was cut open, exhibited unmistakably, the extensive ravages of Bright's disease.

The extent of this cystic degeneration in a subject so very young, was remarkable. Death was undoubtedly caused by the granular disease, but the cysts must have interfered to a considerable extent with the proper function of the organs.

As regards the origin of these cystic formations in the kidney, pathologists do not agree. They are variously regarded as the result of the obstruction of the uriniferous tubes; as the distension of the Malpighian capsules; as the vesicular transformation of the ultimate structure of the gland; as a morbid condition taken on by the cells of the uriniferous tubes, which cells grow into these monstrous cysts; and as an entirely new formation of cystic structure, independant cysts which are developed in the intertubular spaces, not affecting the tubes themselves, except by pressure consequent upon their increase in size. This last view, which is probably the correct one, is that of Prof. Alonzo Clark, which he published to the profession many years ago, and which has since been endorsed by some of the most eminent pathologists and microscopic anatomists.

Dr. Louis Bauer's

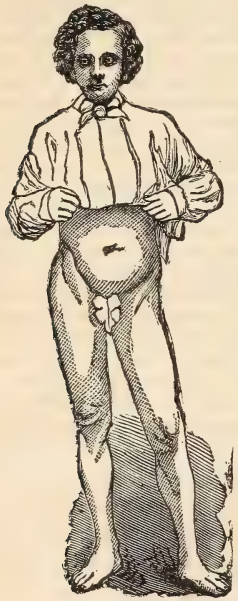
Case of Periostitis of the Left Thigh Bone, with consecutive synovitis and fibrous anchylosis of the corresponding Hip-Joint—Contractions of the sartorius, tensor vaginæ femoris, and external duplicature of the vaginæ femoris muscles. Successful treatment by brisément force, and myotomy of the contracted muscle.

Herrman Weichel, a German youth, about eighteen years, had entered the Brooklyn Med. and Surg. Institute, with the following difficulty: ten years ago, he had been attacked with pain about the left hip and thigh, which resulted eventually in a large abscess at the outer aspect of the thigh. It was opened, and a large quantity of matter discharged; the discharge continuing during several months. Ever since pains in the implicated parts used to return in the spring, and gradually subside during warmer weather. The patient maintains, however, that the mobility of the left hip-joint had never been interfered with, and that the form of the leg had in no way been altered. Since he had entered the baking business, two years ago, and had been more exposed to extreme changes of temperature, the pain had been more severe, and in the last spring was very intense, of longer duration, leaving him in a deformed and crippled condition.

When examined, he presented exactly that deformity so peculiar to the second stage of hip-disease, namely, apparent elongation of the affected extremity, eversion of the toes, declivity of the pelvis towards the affected side, flattening of the left nates, obliquity of the cleft of the nates, with

the consecutive deviation of spine and shoulders. The left hip-joint was immovable, even under the influence of chloroform, and the motions of the entire pelvis were substituted, as is usually the case. The sartorius, tensor vaginæ femoris, and external duplicature of the vaginæ femoris muscles were tensely contracted, and conjointly with the existing anchylosis of the joint prevented most effectually the inward rotation and extension of the extremity. Fig. No. 3, represents the appearance of the patient

Fig. 3.



when admitted to the Institute. There was but very little pain when at rest, but when moving about, he experienced a great deal, as also upon pressure over the joint.

Dr. Bauer had thereupon divided the contracted structures, had forcibly and successfully broken up the fibrous articular adhesions, had placed the patient for some weeks in the recumbent posture, and kept up during that time a powerful extension. The results of this treatment had been favorable throughout, as regards pain, deformity and mobility. When the patient was discharged, his appearance corresponded with that exemplified in the annexed diagram, fig. 4.

Two months after his dismissal, he was again examined at the Institute, and it was ascertained that his recovery had been progressive ever since.

In concluding this case, Dr. Bauer remarked, that there had been originally a moderate degree of periostitis of the femur, which he chiefly inferred from the fact that all the remaining scars were closely connected with the bone, and presented the characteristic funnel-formed shape. Exfoliation, if there had been any, could not have been of much consequence, since the bone had never been noticed in the discharge. Taking the statement of the patient for granted, the cause had been rheu-

Fig. 4.

matic, and hence its frequent return at certain seasons. The preat exposure had rendered the last attack more intense, and this involved the joint. Whether the muscular contractions had been produced directly by the rheumatic process, or by reflex action, could not be decided; at any rate, it was of no consequence in as far as the treatment and its result was concerned.

October 8, 1861.

Dr. Bauer's

Case of Tumor Albus, caused by Osteo-Myelitis of the Femur—Extensive Excavation of the Bone—Periostium forming the posterior wall of the Cavity, being densely covered with newly formed Bony Spiculæ—Hemorrhage into the Knee-joint—Amputation.

The doctor presented one of the most interesting specimens of bone-disease which the society has, as yet, had the opportunity of inspecting, and made the following statement.

Kate O'Connor, aged eighteen years, a delicate, feeble, and emaciated girl, was admitted to the Brooklyn Medical and Surgical Institute three weeks ago, and placed under his charge. Her malady consisted in an extensive tumefaction of the left knee, commonly called white swelling. The soft parts around the joint were much infiltrated and distended by liquid in the articular cavity. The affected parts were tender to the touch, and, on motion, their temperature elevated. There was, however, no discoloration, not even by distended veins. The size of the tumor had almost doubled the circumference of the member. The contour of

the joint had entirely disappeared, and fluctuation could be clearly discerned, both anteriorly and posteriorly, to the joint. In the popliteal space the distension was more clearly marked, the centre bulging out considerably. The extremity was but slightly bent, and evidently more from the articular contents than from muscular contractions. Although the patient did not complain of great pain, and enjoyed tolerable rest, she nevertheless, in her constitution, bore the marks of destructive disease. Her already feeble frame had been still more reduced, so that her weight could not exceed seventy pounds. The pulse was hurried and very small. After meals there was hectic. The disease, evidently of long standing, was said to have commenced in an insidious way in May last; weakness, and occasionally a sudden pain, not to be distinctly located, being the primitive symptoms. Swelling and soreness of the affected articulation commenced at a later period, up to which time locomotion was scarcely impeded. So inconsiderable were the inconveniences from the disease, and so little concern was felt by the family, that they hardly thought it worth while to apply for professional aid, and contented themselves with domestic remedies.

Dr. Bauer had, in the beginning, expressed his conviction that the bone was affected, without being able to determine the exact diagnosis. In his opinion and experience, such an exquisite form of white swelling invariably denoted serious disease of the bone, and the prognosis, consequently, was unfavorable in the extreme. With a view of ascertaining the exact nature of the articular fluid, supposed to be purulent, and relieving tension, the joint was entered with a small trochar. Great was the surprise, when blood to the amount of three ounces was withdrawn. This blood was of a bright color and perfectly fluid. The idea was suggested that the wounding of the highly engorged synovial membrane gave rise to this unexpected result; but the fact that the fluctuation in the joint was perceptibly diminished, was conclusive that it was the pre-existing contents of the cavity. After this operation the limb was extended by a pulley and weight; ice applications being continuously kept upon the tumor, and a careful observation made as to the farther progress of the disease. By the aid of anodynes, the patient experienced great comfort from this treatment, yet her constitution was signally failing, and at last amputation was resorted to as the ultima ratio chirurgorum, to preserve life.

The specimen before the society had essentially aided in forming a definite diagnosis, as is often obtained in this way only in obscure diseases. The specimen consists in the lower half of the left femur. The periosteum covering the posterior surface had been raised off from the bone by blood, which was found in a semi-coagulated state and of a dark color. Having examined longitudinally this periosteum, and the coagula being removed, the internal surface was found to be densely covered by newly-formed bony material, mostly spiculæ of large size, rectangularly inserted. Thus a cavity was formed which anteriorly was connected with an excavation of the femur and inferiorly with the articular cavity, the communication being between the ligamenta cruciata. In this way the blood had obtained access to the joint, and not only filled it entirely so as to extend into the superior cul-de-sac, bursting into the sub-rectal bursa. The excavation occupied both condyles, the triangular portion above, and extended upward into the medullary cavity. The lower wall separating it from the joint was extremely thin, and nearly reached the articular cartilage. The walls were rough and covered with disintegrated bony material, by no means surrounded by the eburnated structure, so characteristic of bone abscesses. The aperture of this cavity was as large as a new cent, and its margins soft and irregular. The cavity itself was filled with coagula solely. That portion enclosing it was not distended, its circumference being rather reduced by exfoliation. The articular cartilage was moderately thickened, and its color milky. At the anterior surface of the bone, above the epyphesis, the periosteum was likewise separated from the bone, and also covered by bone material. The marrow was softened and of rosy color. The soft tissues were ædematous to a high degree, and slime tissue had formed in abundance.

From these pathological conditions, it cannot be questioned, that in the present case there had been an insiduous form of osteo-myelitis. The character of the cavity precludes the possibility of a bone-abscess. Whether the disease had been superinduced by tubercular deposits could not be decided at this juncture. It was difficult also to determine from what source the hemorrhage had come. The quantity of the blood indicated the rupture of larger vessels than the endostium is supplied with.

BRADFORD COUNTY MEDICAL SOCIETY.

The Bradford County Medical Society met at the Odd Fellow's Hall, in the borough of Towanda, on Wednesday, Sept. 4th, 1861, at 10 o'clock, A. M.

The President, Dr. Parsons, in the chair.

The following members were present, viz: Drs. Parsons, of Troy; Horton and Homet, Terrytown; Allen, Smithfield; Turner, Mason, and Ladd, Towanda; Bliss, Le Roy; Clagett and Moody, Standing Stone; Keiff, Athens; and Holmes, of Canton.

The minutes of the last meeting were read and approved.

Dr. Mason presented an invitation from C. L. Ward, Esq., requesting the Society to dine with him at 3 o'clock, P. M. The invitation was unanimously accepted, and a Committee consisting of Drs. Horton, Bliss, and Turner, appointed to inform Mr. Ward of its acceptance, and to draft resolutions and sentiments for the occasion.

Dr. Horton offered the following: that as it is the request of the Volunteers of this County, that a Surgeon from this section be appointed by the Government to attend them. Therefore,

Resolved, That we unanimously recommend

Dr. E. P. Allen, of Smithfield, for such appointment. Carried.

The President then announced, that the Society was ready to receive written reports of cases and papers.

Dr. Allen reported a case of concussion of the brain, from a blow on the head, producing a fissure, and slight depression of the outer table of the cranium. After a few minutes, he was sensible for a while, and then became unconscious, comatose, and vomited. He was treated antiphlogistically by venesection, purging, &c. After a few days he began to be sensible and conscious, but had double and weak vision, which was remedied by confinement in a dark room for one week. In time he recovered without the operation of trepanning.

Dr. Clagett reported a case of dysentery that in a few days assumed the form of acute rheumatism, which by metastasis attacked the uterus, producing severe labor pains. She recovered by the use of anodynes and anti-rheumatics.

Dr. Holmes, a case of alcoholic poisoning in a young man aged 16 years. He became comatose, within two hours after taking five drinks of whisky, was left by his companion in his own father's barn about 12 o'clock at night, to get sober, and was found dead in the morning. A post-mortem revealed venous congestion of the brain, and an alcoholic scent in the ventricles, and over a pint of liquid in the stomach, with a strong alcoholic smell. This case strongly bespeaks a moral warning, as well as a caution, not to leave persons in like condition unaided.

Dr. Holmes, also, reported three cases of chorea, two of which were connected with deranged menstruation, and the other following acute rheumatism. All soon recovered under a treatment adapted to indications, without specifics, which is the true principle of treatment in all diseases, leaving specifics out of the question.

Dr. Homet, a case of a little boy at 6 years, that had nearly severed his fore finger with an axe, excepting a small portion of skin on the inside. It was immediately perfectly adjusted, and by cold water applications was completely restored.

Dr. Mason, a case of fracture of the skull in a lady aged about 30 years, with slight depression of the outer table. In jumping from a carriage she fell, was not unconscious, was treated antiphlogistically, and recovered. As the Dr. had been censured for not trepanning, the Society debated the subject, and unanimously sustained him for not operating, as well as to recommend the rule not to operate until the symptoms were sufficiently severe to warrant it.

Dr. Rockwell communicated a case read by Dr. Mason, of an incised wound of the abdomen, with a portion of the omentum protruding, which failing to return, the doctor cut off, with very little hemorrhage, and then dressed the wound; the man was at his labor in ten days.

The lecture, essays, and the medical discussion, were postponed to the next meeting.

Mr. H. M. Moody, student of medicine with Dr. Allen, read a very interesting paper on sulphate of quinine, which reflected much credit on the author. This exhibits the right spirit in medical students.

The President then appointed a committee, consisting of Drs. Holmes, Bliss, and Homet, to nominate officers for the ensuing year.

The Committee on nominations then reported the following, viz:

For President—Dr C. M. Turner, of Towanda.

1*st Vice-President*—Dr. W. L. Clagett, of Standing Stone.

2*d VicePresident*—Dr. E. G. Tracy, of Sylvania.

For Transcribing Secretary—Dr. Daniel Holmes, of Canton.

For Corresponding Secretary—Dr. V. Homes, of Terrytown.

Treasurer—Dr. E. H. Mason, Towanda.

Censors—Drs. Horton, A. Parsons, and Benj. De Witt.

On motion of Dr. Horton, the report was accepted, and the committee discharged.

Dr. Mason moved that the list of officers reported be unanimously elected *viva voce*, which was carried.

A committee, consisting of Drs. Allen and Ladd, were appointed to conduct the newly elected officers to their respective seats.

Dr. Turner, the newly elected President, after being introduced to the Society, gave a brief address, making some very appropriate remarks, and promised his hearty co-operation with the members in all its interests.

The other officers being duly installed, promised also to exert all their energies to cooperate with the President and members for the very best interests and good of the Society.

Then, by the request of the Society, Dr. Parsons, the retiring President, delivered the annual address, which was very appropriate for the occasion.

The Society tendered their thanks to Dr. Parsons, for the interest he had previously taken in its labors, and for the promptitude and despatch with which he had discharged his official duties during the past year, and tendered him the very best wishes of the Society in his declining years.

The President then appointed Dr. Horton Physician, and Dr. Ladd, Surgeon to the clinic, and announced it the next order of business.

Dr. Ladd presented a case of cancerous tetter of the skin on the nose, extending to each cheek. The lady was about 50 years of age, and the affection had existed a number of years. Several irregulars had warranted a cure and failed. No cure was promised, and no treatment recommended, but palliative.

Dr. Homet, a case of single hair-lip, child, aged 3 years, operation advised.

Dr. Mason, a very interesting case of supposed hermaphrodite, child, aged 2 years, which was pronounced a male. An operation had been advised by a quack, but the Society discountenanced it.

Other cases of minor importance were presented.

The hour of 3 o'clock having now arrived, the Society proceeded *en masse*, to the residence of C. L. Ward, Esq., where the members were received with cordial hospitality, and partook of a sumptuous repast; after which the following sentiments were offered by the Secretary, Dr. Holmes, and very appropriately responded to, viz:

The Medical Profession—By Dr. Horton.
Our Country—By Dr. Bliss.
Our Host and Hostess—By Dr. Turner.

The latter was, on behalf of his parents, replied to by their son, Mr. Harry Ward, in a few brief and noble sentiments, which did honor, not only to the parents, but the occasion.

The Society then adjourned to the library, which probably is not surpassed by any private collection in the State, and spent an hour in the examination of its extensive and valuable collections of books, among which are many specimens of the earliest exhibitions of the art of printing. And this vast collection which has been procured at an enormous expense from Great Britain, Europe, Egypt, and in fact from every part of the world, is rendered doubly interesting and instructive, by its numerous living representations of past ages, customs and times, that books cannot describe.

After which the Society re-organized, and unanimously adopted the following resolutions, viz:

Resolved, That this Society, truly and gratefully appreciate the courtesy of C. L. Ward and family, and that we extend to them our warmest acknowledgments.

Resolved, That whereas, the war now being waged against our Government, has been undertaken without any apology or excuse, and has for its only object the overthrow of free institutions: Therefore,

Resolved, That we will give to the National Administration our most hearty co-operation and support in the execution of all necessary means for its prosecution, and the total annihilation of treason.

The President then appointed Dr. Holmes, Lecturer, and Drs. Mason and Rockwell, Essayists, for the next meeting, and the subject of blood-letting in acute diseases was chosen for discussion at the same time.

Dr. Holmes proposed Dr. James Davison, of Canton, for membership of this Society. Deferred till next meeting.

On motion of Dr. Horton, the Society adjourned, to meet in the borough of Athens, on the 1st Wednesday (and 1st day) of January, 1862, at 10 o'clock, A. M.

Daniel Holmes, M.D., Sec'y.

Canton, Sept. 13, 1861.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

A NEW OPERATION FOR CONVERGENT STRABISMUS.

In the *San Francisco Medical Press*, for July, Prof. E. S. Cooper has a paper upon the operations for the cure of convergent strabismus, in which he criticises the old methods of operation, suggests a new plan, and reports several cases in illustration. He avers that the results of all previous operative procedure have been unsatisfactory—frequently the resulting deformity has been quite as great as that for the removal of which the operation was performed. The cause of this he attributes to the following: "the position of the eye, in many instances, continues changing, after the operation has been performed, for months, and sometimes years, and it is in consequence of this, that I have adopted a process of treatment different from that pursued by others." The following are Prof. Cooper's rules of operation:

"1st. The extent of the division of tissue should never be based simply upon what is commonly required.

2d. In performing the operation the surgeon should not hurry through it, but divide the parts to a limited extent at first, then stop, absterge the wound carefully, and observe the change, if any, produced, and thus the operation should be continued throughout, the surgeon stopping, from time to time, to see how nearly the eye becomes straight.

"This plan renders the operation tedious but safe, and, if properly pursued, is nearly always successful. It is not true, as authors would have us believe, that but few cases are entirely successful, that is, leaving no deformity whatever. Seventy-five per cent., at least of all that I operate upon, terminate in a complete removal of the deformity, so that not the least want of symmetry can be discovered in the contour of the eyes. But in a majority of cases the operation is repeated once, often twice, and occasionally three or four times, and I have had several cases in which both eyes had to be operated upon in this way, before success was achieved: The rationale of the

plan is this: by dividing the tissues to a moderate extent, the position of the eye will be changed slightly, even in cases of true fibrous degeneration, and as the wound heals, which it does readily enough by the reproduction of the necessary tissues of greater amplitude than those divided, and the position of the eye, at the end of from three to six weeks, improves in position, and is ready for a second operation, if necessary: the patient, in the meantime, suffering no inconvenience whatever, except in the fact of having the eye bandaged. Not the slightest inflammatory action of a troublesome character ever supervenes. I speak confidently, having operated upon over seven hundred cases without its occurrence in any. Nor is this to be attributed to our climate, as some are disposed to say."

REVIEWS AND BOOK NOTICES.

A Treatise on Diseases of the Joints. By Richard Barwell, F. R. C. S., Assistant Surgeon, Charing-Cross Hospital, etc. Illustrated by engravings on wood. Philadelphia: Blanchard and Lea, 1861. pp. 463.

No department of surgery has of late times attracted greater attention and been more elevated by improvement than that of joint disease. It has been the most important field for the developement of conservative surgery, and much of joint disease that was formerly neglected as incurable, has been made amenable to successful treatment. Limbs and lives are now frequently saved by ridding the member of an offending joint which has paralyzed its action, and almost worn out, by intense suffering, the existence of the patient, and been brought back to strength and usefulness. The blessing of anæsthesia has increased the domain of the surgery of the joints, and operations which, without it, would have been too much for the worn-out sufferer to tolerate, can now, without suffering, restore him to health and activity.

The study of joint diseases is of the greatest importance from their great prevalence, and the suffering and damage to the frame which they occasion; yet, we venture to assert, that no diseases are, among the mass of the profession, considered less attractive, and are less understood. Diseases of the hip-joint, for which now so much can be done to relieve long-enduring agony, and to restore the limb to usefulness, has been, until recently, an opprobrium of surgery; and that most unfortunate articulation, the knee, is, indeed, indebted to recent progress. Still, to a majority of practitioners, the philosophy of the improved treatment in such affections is unknown.

Notwithstanding the effective direction for some years of surgical attention to the joints, the work before us is the only one of recent issue of a comprehensive character. Those of Cooper and Brodie, although valued in the literature of the subject, are not up to the times in a practical way, and the improvements of our own countrymen lie scattered in the pages of periodical literature, from whence they will be garnered abroad to return to us with their authorship ignored.

The author says, that for a number of years his attention has been devoted exclusively to the subject, and his name has been frequently recognized at the head of practical articles in the medical periodicals. Attention was particularly attracted to one article, in which the author announced his discovery of tubes in the articular lamella—a series of minute parallel tubes which run in a wavy course from the true bony structure to the cartilaginous surface.

A very considerable portion of the book is devoted to the consideration of disease of that structure of a joint which is most liable to disease—the synovial membrane.

We notice with satisfaction that the author does not teach the almost universal error of the check to secretion on the commencement of inflammation, as if thus to account for the "friction sound," which occurs early in synovitis. The first effect of inflammatory irritation is profuse secretion of the synovial fluid. The remarks on the treatment of synovitis are judicious. The author is evidently one of the class of practitioners who rely much on narcotics for the cure of inflammation.

"Pain," he says, "is an evil in itself, from which every surgeon is bound to save his patient as far as possible; but it is, besides, I am convinced, a source, when it lasts, of additional diseased action; it is a direct irritant." The irritation and exhaustion produced by suffering has been too little thought of in the treatment of disease.

Confidence is also expressed in the prophylaxis of inflammation by narcotic treatment. The author says, that "if now a patient were to come under my care, with a wound of an important joint, he should, probably, be kept opiated for several days."

The author admits the propriety of opening suppurating joint cavities. "A joint once suppurated has lost that sensitiveness to contact of air which it naturally possesses," yet, in apparent contradiction, in directing the emptying of the cavity of the hip-joint, he says that "the greatest caution must be used that *no air* be permitted to enter."

It seems strange that a suppurating joint cavity has not always been recognized as an abscess, and so treated by evacuation. The very successful practice of Dr. E. S. Cooper, of San Francisco, in the treatment of joint disease, and his novel observations on the non-irritation of air when freely admitted to the cavities of joints, seem to be unknown to the author, as are also other important discoveries and improvements in treatment by our countrymen, Drs. Louis Bauer, and A. G. Walter.

The chapter on hyarthrosis presents the author's peculiar views which will meet with criticism and objection. The so-called gonorrhœal rheumatism he asserts decidedly to be a mild form of purulent infection, and seeks for an analogy in the frequency of pyarthrosis following surgical operations about the male perineum, urethra, and prostate. In opening joints filled with pus, in this disease it is said that "the wound should be closed as soon as the pus has ceased flowing, and pressure by means of a bandage is to be applied." We are convinced that this practice is a very great error, and that much greater safety to the patient would be gained

by making one very large opening into the joint, or, better, two free openings, and keeping them open so as to effect a very complete drainage, and to facilitate the washing out of collected pus.

In the treatment of strumous synovitis, when counter-irritation is resorted to, the powerful impression of the actual cautery is advised. This will be corroborated by all who have had experience with it in the treatment of painful chronic joint disease.

On the subject of the pathology and treatment of hip-joint disease, we expected to have learned something from the observations and practice of Dr. Barwell, but have been disappointed. Of the pathology, the labors of our own countrymen have elucidated more, and as to the mechanical part of the treatment our contrivances are incomparably superior to anything he seems conscious of. Credit is given to Dr. Bauer, of Brooklyn, for his introduction of the practice of dividing the muscles in hip-joint disease, which are most at fault in keeping up contraction, painful spasm, and startings. The author advises the operation only, when the extending force alone fails to relieve the painful symptoms. He approves of Dr. Bauer's operation of opening the distended synovial cavity in this disease, thus anticipating the discharge, but avoiding the slower and more destructive effects of abscess by burrowing of pus in the surrounding structures, with its concomitants of suffering and irritative fever. It is admitted that "surgery is indebted to Dr. Bauer for this operation, and it will, as far as my experience goes, be found very valuable. In my hands it has certainly relieved pain to a remarkable degree, and the formation of abscesses has seemed, to say the least, postponed. But the more extended experience of Dr. Bauer himself will afford a more reliable account of its benefits than my smaller number of cases can furnish."

The chapter on excisions of joints is interesting and highly practical.

The work is illustrated by cuts, particularly in reference to appearances of limbs after the operation of excision of joints. It is gotten up in elegant style, and, in the present perilous times, the medical profession is indeed indebted to the publishers for reproducing such a monograph. Its teachings will be valuable to every class of practitioners, for joint disease is of so frequent occurrence, and dependent on too varied causes to belong exclusively to any special province of practice.

The Morbid Effects of the Retention in the Blood of the Elements of the Urinary Secretions. By W. W. Morland, M.D. Fiske Fund Prize Essay, 1860. Philadelphia: Blanchard & Lea, 1861.

The above is the title (almost as large as the essay itself) of the last volume on urinary pathology which has reached us. We observe that the whole matter is summed up, in the lettering on the side, by the word *Uræmia:* and hope we shall not be deemed hypercritical if we suggest that *Urinæmia* would have been more appropriate, as the formation is limited to a special condition of the organism long supposed to be due to retained urea. This meaning is adopted in the work by the author himself.

In replying to the question propounded by the Trustees, Dr. Morland has contented himsef with giving us an abstract of Dr. Thudichum's work, varied with quotations from Braun's chapters on Uræmic Eclampsia, Golding Bird, Prout, Bernard, etc., etc., and produced a pretty good (though rather tedious) review of the whole subject. We cannot help wishing that he had condescended to throw some new light upon such mooted points as the actual toxic agent in uræmic poisoning, or the diagnostic value of the absence of the chlorides from the urine in pneumonia. A few well-made experiments on these points would have given a high scientific value to labors which must now rank merely as those of a compiler. The work will prove interesting to those who wish to know where to refer for valuable papers on urology.

J. C. M.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, OCTOBER 19, 1861.

THE INTRODUCTORIES.

At 12 M. on Monday last, a large collection of students and graduates assembled in the chemical lecture-room of the University of Pennsylvania, to listen to the introductory lecture from Prof. Wm. Pepper. The speaker was cordially greeted as he entered, and after a brief introduction of welcome to the class, some of whose faces, he observed, were familiar, and others were here for the first time, he proceeded to speak in a somewhat desultory manner *of the progress of medical science and the means of attaining it.* He discarded the idea, sometimes entertained, that no progress has been made in the science of medicine for the last years; spoke of the strong tendency, in some classes, to disparage the well-settled principles of the science, and of the want of faith in the efficacy of the art which was one of the results of such incredulity. As an evidence of the rapid progress medical science and art had made, he referred to the revelations in diagnosis made by auscultation and percussion, and by the microscope. It was not long ago that the stethoscope was declared, by a distinguished professor, to be an instrument with a fool at

one end and a patient at the other, and that not one in a thousand could distinguish *bruit de soufflé* from thunder; now this instrument, or its representative, the human ear, was universally acknowledged as an invaluable help in diagnosis, and yet all these are yet in the infancy of their progress, and await future revelations to make them still more complete in their demonstrations. The physician of this day is expected to designate the particular organ which is the seat of disease, to indicate the precise locality, extent, and nature of the malady with which his patient is afflicted; and this he is able to do, aided by the superior light which progress has thrown upon medical science and art. He also mentioned as another evidence of medical progress the fact that physicians of this day were better able to cure disease; the progress in therapeutics had given them a better knowledge of remedies and their application. Diseases are conducted to a safer issue; are treated more rationally; the rate of mortality is decreased, as shown by the English census, and by hospital reports. The duration of disease is also shortened; and these results are not attributable alone to improved education, but to progress in science. He also spoke of the benefits which the physician confers upon his fellow beings, extending not only to the cure but to the prevention of disease, and to the shielding of their fellow men from the pestilence, as exhibited in the cure and prevention of scurvy among the sailors; in the adoption of sanitary regulations, whereby the soldier is rendered less liable to death from disease, which is more fatal to him than the bullet; in superintending public charities, and in aiding whatever tends to enlighten or to elevate. And yet there are some who would knock down the ladder by which such eminence is attained, and by which they, themselves, have risen to distinction. The speaker alluded to the intricacies of the human system, the difficulties attending the study of vital phenomena; and whilst he was ready to admit that medicine was by no means infallible, the only surprise was that so rapid and great progress had been made.

The speaker then adverted to the professions of law and theology in contrast. Law demands much study, but the lawyer has time and leisure allowed him for investigation before he decides. The physician must give his decision at once, and it may affect life. All have read of the "glorious uncertainty of law." Both these professions may be essential to our well-being, but inasmuch as health is more important than dollars and cents, so its custodians must be held as greater benefactors of the race. So also in theology, the spiritual is higher than the natural, yet there is no unanimity of sentiment among theologians, and it cannot be denied that there is great quackery and uncertainty in both of them. So that the charge of want of unanimity, which has been so frequently urged against the medical profession, is of no avail; and yet it may have given rise to the various errors and humbugs of the day, from all which the diligent student and inquirer will gather whatever will strengthen or adorn our temple. The speaker here alluded to the revival of Brunonianism, or the treatment of disease by stimulants, formerly in vogue in the days of Brown. Its tendency, he remarked, is to foster the use of stimulants generally. Brown, himself, died a victim to his system. He also adverted to a class of practitioners, which he termed conservators in medicine, who seemed to make haste to place themselves on the stool of confession, in regard to the practice of former days, as being too vigorous and too heroic, and to have become converts to the doctrine that nature, almost unassisted by art, will accomplish the cure of disease in the system. Nature versus art may be a favorite notion; the lancet may, in some instances, have done injury; medicines may have been given too freely; but neither should be discarded on that account.

The speaker closed with some excellent practical remarks, more especially directed to the class before him, in which he especially urged the importance of thorough preliminary education, as a requisite to that permanent progress in medicine which we all desire to see.

The happy hits of the speaker were frequently applauded.

The introductory lecture at Jefferson College

was delivered by Professor Franklin Bache at 7½ o'clock, P. M. The full faculty were present, and a large number of students and graduates, nearly filling up the large lecture room of the building.

The speaker announced no particular topic as the theme of his discourse, but expressed his desire to make what he had to say of practical value to the class. As one of the most important to their success he urged the necessity of *method* in study. The student can, to some extent, acquaint himself with anatomy at home, by the use of the skeleton, and by dissecting the bodies of the lower animals; but, in his opinion, no man was justified in performing a surgical operation upon the living body who has not dissected the dead. Chemistry too was an important branch of the study of medicine, inasmuch as it has a very close and intimate relation to the practice, but it was a demonstrative science, and to be comprehended needed to be seen.

The lecturer then spoke of materia medica, and gave it as an important rule for beginners to read of no drug without having a specimen of it before them, in order that they might practically test its qualities. The three kingdoms of nature were the source from whence the materia medica was made up; the animal, mineral, and vegetable. The study of zoology, minerology, and botany, were, therefore, of great importance. The latter in an especial manner. The wide domain of nature, the fields and the flowers, were spread out invitingly before the student, and he should enter upon their study with zeal. This branch was too much neglected. The science of medicine is divided, for purposes of study and convenience, into three great branches—medicine, surgery, obstetrics, they are really but one. In my plan of study, the speaker remarked, the *elementary* branches should first be taken up, and I would have the student of medicine apprenticed to an apothecary from the age of fifteen to eighteen, as a part of that elementary course. Then I would have him enter upon what may be termed the advanced branches; he should attend three courses of lectures, not taxing his mind at first with the lectures on all the branches taught in our medical schools, but listening to, and taking notes of only a part, He should read text books, attend dissections, and himself dissect. During the summer preceding his last course he should prepare his *thesis*. He should not defer it later lest it might be executed in too much haste, and not fairly represent his literary qualifications. In this manner the student will become the thoroughly qualified scholar, and be prepared to commence his duties as a physician with a consciousness of being able to fulfill its arduous duties. The speaker closed with some excellent advisory counsel to the class. The lecture was brief and pointed, and enlivened with a vein of quiet humor which elicited frequent applause.

On Tuesday evening the introductory before the Philadelphia School of Anatomy and Operative Surgery, was delivered at the lecture room of that institution by Prof. Agnew. His subject was a *Biographical sketch of Baron Larrey, Surgeon to Napoleon's army*. The subject was an exceedingly interesting one, and was so admirably written, arranged, and delivered, as to retain the interest and attention of the audience for the nearly two hours occupied in its delivery. Some intimations that it may be published leads us to attempt no further notice of it for the present.

—o—

EDITORIAL NOTES AND COMMENTS.

Women's Hospital.—This Institution, which received its charter from the Legislature of Pennsylvania in March last, is soon to be opened, we understand, in a commodious building on College Avenue, opposite Girard College. It is designed for the treatment of non-contagious diseases of women and children. The Board of Managers is composed entirely of ladies of "different religious denominations." This is designed, we suppose, to prevent the institution from becoming sectarian, or to insure its friends that strict impartiality will be exercised in the admission of the sick of all the sects represented in its management. This is a new feature in hospital arrangement, and deserves mention as a new era in hospital history. The honor of initiating the movement will, without doubt, belong to the Women's Hospital of Philadelphia. At the risk of being considered ungallant, (which above all imputations we would utterly disavow,) we would suggest

that nothing is said in regard to sectarianism in treatment, a point which in our humble opinion, is *quite as important as the other*.

The resident physician of the hospital is Mrs. E. H. Cleveland, who has just returned from a visit of inspection to hospitals in Europe, having spent nearly a year in the Maternite of Paris. A similar institution has, we understand, been in successful operation in New York for some time past, and the experiment is now to be tried in Philadelphia. We term it an experiment because the idea of a hospital exclusively controlled and conducted by ladies is novel in this country, and some doubts attend its success. We would earnestly hope, therefore, since the "Women's Hospital of Philadelphia" is a fixed fact, that a high standard of medical education, in those who have charge of its inmates, may be required. If such be the case, it may not only deserve the sympathy and contributions which it asks of the public, but may be entirely successful.

To the Profession.—The importance of *vaccinating* or revaccinating our troops, is admitted by all. Through the activity and energy of our State Medical Staff, twelve thousand of the "Reserve Corps" of Pennsylvania were thus protected. Subsequent levies were also vaccinated as far as time would admit. Since this, a large body of troops, amounting to about nine thousand, have been assembled at Camp Curtin, near Harrisburg, and are there detained in completing their organization. It is the wish of Surgeon-General Smith, that these men should be similarly favored, but it is found difficult to obtain fresh and reliable virus at this season of the year. We, therefore, desire the profession, in imitation of the generous conduct of Jenner, freely to aid in this effort. All vaccine sent to No. 1112 Walnut street, to Henry H. Smith, M.D., will be judiciously applied to the protection of the State troops now at Harrisburg, and, if in excess, forwarded to the surgeons of independent Pennsylvania regiments, assembled around Washington, and not thus cared for prior to being mustered into the United States service. We anticipate a prompt and hearty co-operation in this important and patriotic measure.

—o—

The Empress of Austria, who has been under the treatment of Professor Skoda, for pulmonary tuberculosis, is said to be improving.

Correspondence.

NEW YORK CORRESPONDENCE.

Heureux commencement est la mortié de l'ouvre.
Fr. Proverb.

This week inaugurates the practical commencement of our regular college courses. There will then be abundant material for clinical reports; discursive lectures to be commented upon; the various styles of the distinguished professors, and the immediate details of the most interesting cases. At present there is nothing very new; nothing specially out of the way, or particularly in the way, of any medical importance.

The excellent tonic, styled by those who employ its virtues: "Ferro-phosphoretted Elixir of Calisaya Bark," has proved of great benefit to worn-out patients and debilitated and anæmic females. Ere long it may become officinal.

Our dispensaries are full of applicants, who seem to feel less able to rise out of their disorders in proportion as their fiscal troubles weigh upon the mind.

The Naval Board of Examiners are carefully fulfilling their duties with most conscientious rectitude in the Navy Yard, Brooklyn. The applications for surgical positions find that there exists no paucity of stumping questions. Though many have been accepted, the rejection of the incompetent is of itself a recommendation of the honesty of the system.

Now that quacks are being placed to the care of wounded soldiers—far out West—it behooves the Eastern men, at least, to have only those selected who are cognizant of, and qualified for, the responsible position of surgeon.

In your list of the worthy physicians who risked life and future prospects for the sake of alleviating the sufferings and mitigating the woes of their distressed and wounded comrades, you accidentally omitted that of Dr. Ferguson, a student of Prof. James R. Wood. This ambitious Doctor, who, at the time of our "constitutional" difficulties, was fulfilling his duties at Bellevue Hospital, left for the Union army, and was on the field at the Battle of *Full* Run! Having taken the proper care of his wounded, he was about to retire, when he perceived some cavalry approaching with speed, desirous of capturing him. Putting spurs to his horse he succeeded in reaching the movable hospital, and called out to his associate to hoist a flag indicating their vocation. It was, however, too late. The next minute a volley was discharged at him—the result was a compound fracture of both bones of one leg. Since that time Dr. Ferguson has received no medical or surgical aid from the *rebels*, though their prisoner. The wound has suppurated, and fears for his life are entertained. The Doctor on the union side has written and begged strenuously to

be permitted to attend, but in vain. Dr. Ferguson was also robbed of $200, in his pocket at the time. Dr. Mott has now written, I believe, to obtain surgical aid. What strange brutality towards a noble surgeon.

Gourmet.

NEWS AND MISCELLANY.

Military Hospitals at Richmond, Va.—The following interesting account of the Military Hospitals in Richmond, Va., where only male nurses are employed, is taken from the *Enquirer* of a late date. Five hundred prisoners have been treated at the hospital on Maine street, under charge of Dr. Higginbotham, from June 28, to September 27. Of these, three hundred wounded experienced a mortality of .096, and two hundred sick, not wounded, lost a per centage of .0€, the two categories together .082; being forty-one deaths, of which twelve were from sickness, without wounds. Here, Dr. Higginbotham has enforced personal cleanliness and discipline. It is the only one of the large hospitals of its class which has been furnished with bath tubs. The sick prisoners, when refractory, are compelled to make use of them, and such as engender vermin are made decent in spite of themselves. One of their own number is made to keep watch over each bath tub, to prevent the rest from abusing it.

The Byrd Island Hospital, at Gilham's factory, which, as well as the almshouse, is beautifully situated, airy and capacious, states on its books a mortality of only three per cent., or 15 deaths to 500 patients between August 15 and September 20, or rather to 400 patients, as about 100 were sent away during their illness—increasing the per centage of deaths to .0375.

The Almshouse Hospital book has 240 entries for the month of August, and 39 deaths recorded—making a per centage of .0946, on 373, the whole number of patients treated. By reports rendered to Surgeon-General Moore, however, the aggregate of Confederate soldiers treated in August was 269, and that of Federal prisoners 271—together 540—which, after substraction of those sent away to other hospitals, &c., leaves still nearly 500, and reduces the per centage of mortality to .078.

Bellevue, Dr. James Bolton's hospital, treated, from May 4 to September 25, 127 soldiers; had returned 78 to duty, retained 37, and had buried 12.

The Medical College Hospital, the property of a corporation which boards a large number of Confederate patients, shows entries for the months of July, August, and September, of 486, and deaths 38, or .078 per cent. The actual number of patients at one time lately was 100. The relative mortality is due, in part, to the number of almost dying men brought in from the camp-ground of the Tenth Louisiana Regiment. This is only a particular instance of a neglect excessively frequent, and to which thousands of precious lives have been sacrificed.

The average mortality of the large hospitals cited is more than double that of the ladies' private hospitals.

The illness of an officer in charge at the St. Charles Hospital has rendered it too difficult to obtain statistics of that institution—a noble charity of the city of Richmond, managed by an association of gentlemen, and which has extended its protection to from 300 to 450 soldiers at once, within the last three months.

Dr. Wm. B. Atkinson, of this city, has been elected to the Chair of Obstetrics and Diseases of Women, in the Howard Hospital.

Our types last week re-elected Dr. S. W. Butler as Physician of the Insane Department of the *Pennsylvania* Hospital. It should have been Philadelphia Hospital.

The number of Sick in the Hospitals at Washington for the week ending October 11th, was 954, a slight increase over last week. They are distributed as follows: E. Street, 84; Seminary, 187; Union, 199; Columbia, 235; Circle, 59; Alexandria, 190.

Professor Ives, of Yale College, who died on Tuesday at New Haven, was in the 85th year of his age. He graduated at Yale in 1794, and in 1820 became a Professor in its medical school. He was one of the most successful obstetric practitioners in America.

Dr. W. S. Fort, of Jersey City, has been appointed an assistant surgeon in the United States Navy.

Dr. A. N. Dougherty, Surgeon of the Fourth New Jersey Volunteers, has been appointed Brigade Surgeon.

Dr. E. B. P. Kelly has received the appointment of surgeon, and Dr. Chas. C. McLaughlin, that of assistant surgeon in Col. Gosline's Regiment of Pennsylvania Zouaves, the 45th. The regiment is now full, and is soon to leave for the war. Both of these gentlemen were formerly connected with the Philadelphia Hospital, and both have visited the hospitals of England and France.

A Want!—The *Richmond Dispatch* says: "We want to see Philadelphia sacked, the medical colleges turned inside out, and all the Professors brought in double irons to the South, and allowed no other rations but their own potions and lotions."

Dr. T. Gaillard Thomas, a prominent medical practitioner of New York, and well known to the profession as the originator of the postural treatment of prolapse of the funis, has become connected with the *American Medical Monthly*, in the department of Domestic Medical Literature.

The Revised British Pharmacopœia is announced to appear by the first of the coming year.

MARRIED.

Dunham—Stout.—In New Brunswick, N. J., on the 8th instant, by the Rev. Dr. Crosby, Charles Dunham, Jr., M.D., and Elizabeth W., daughter of Lewis Stout, all of that city.

Helfrich—Kelley.—On the 8th instant, by the Rev. Dr. Taylor, Dr. J. S. Helfrich, of this city, to Miss A. F. Kelley, only daughter of the late Captain Walter Kelley, formerly of New York.

Culbertson—Hill.—Sept. 2d, by Rev. J. Stoneroad, Dr. J. Culbertson, of Shippenburg, Pa., and Miss Nancy, daughter of Col. A. M. Hill, of Fayette county, Pa.

DEATHS.

Davis.—At Alton, Illinois, on the 24th of September, William Pennock Davis, son of the late Dr. George Davis, Surgeon U. S. Navy, formerly American Consul at Tripoli, and grandson of the late William Pennock, Esq., U. S. Navy Agent at Norfolk, Va.

To Correspondents.

Postage Stamps.—Subscribers will please *not* send us the old style of stamps, as they are worthless to us, not being received for postage at the Office in this city. They will also please send us *only one* and *three* cent stamps. tf

D. G.—The roots or bark of medicinal plants should be gathered in the fall.

B. S.—There is but one hospital in this city which requires a fee from students.

W. P.—The best and most recent works on the Rectum and Anus are those of Ashton and Bodenhamer.

Communications Received

Canada, East.—Dr. A. D. Stevens, with encl. *Connecticut.*—Dr. C. H. Pendleton, with encl.; L. N. Beardsley, do; L. Gaynor, do; M. White, do.; Dr. C. R. Hunt. *Delaware*—Dr. J. R. Shivers, with encl.; J. D. Craig, do. *Illinois.*—Dr. Crossby, with encl.; C. A. Paul, do. *Indiana.*—Dr. D. L. Personett. *Kentucky*—Dr. D. Johnston, with encl. *Massachusetts.*—Dr. N. Green, with encl.; O. H. Flagg, do; Dr. W. E. Wright, Dr. L. D. Seymor, Dr. H. L. Bishop; Dr. E. Alden, with encl.; Dr. J. W. Burrows, (all right;) Dr. Ricketson, Dr. Josiah Brown, (all right;) Dr. W. H. Traver; Dr. E. T. Gatchell; Dr. W. H. Louge; D. F. W. Mason, with encl.; Dr. A. Wilson, Dr. J. C. Baker, Dr. C. Cullis, with encl.; Dr. Edward Barton. *Michigan*—Dr. C. H. Southworth; Dr. W. J. McHench, with encl *Minnesota*—Dr. J. W. Daniels. *New Jersey.*—Drs. R. F. Chabert, with encl.; J. B. Ward, with encl.; T. Johnson; S. T. Locke, with encl, E. M. Distrow, do; Dr. F. Gauntt; Dr. J. S. Linabery; Dr. C. Shepherd, with encl., S. W. Scriver, do; Dr. H. P. Ely. *New York.*—Dr. Louis Bauer, with encl, (2); Dr. Geo. W. Barr, W. A. Townsend; Dr. A. Shiland, with encl., Geo. K. Smith, do; S. G. Carpenter, do; J. B. Hayes, (by Am. Tr. Soc.;) J. F. Scott do; Dr. R. R. Gregg; Dr. W. R. Gorton; Dr. O. C. Gibbs, (2;) Dr. D. Hopkins, with encl.; B. A. Mynders, do. *Ohio.*—Dr. B. F. Payne, with encl.; H. P. Kay, with encl; Dr. A. H. Stephens; Dr. Edward Lynch, (com.) *Pennsylvania.*—Dr. S. P. Detwiler, with encl.; Dr. J. K. Hertz, with do; Dr. Ira Day, do; Dr. A. G. Cross, do; Dr. W. Braden, do; E. P. Hentz, do; J. S. Shimer, do; A. H. Smith, do; Dr. A. Dimmock; Dr. J. L. Duncan, with encl.; J. G. West, do; Dr. A. R. Savidge; Dr. Rosenberger; Dr. R. H. Patterson, with encl; B. M Collins, do; Dr. F. Howard; Dr. A. H. Muth; Dr. A. Achenback, with encl.; W. W. Wick, do; J. G. Mensch, do; Dr. A. A. Ziegenfuss; Dr. Geo. S. Wentz, with encl.; Dr. J. A. E. Reed. *Rhode Island*—Dr. S. W. Butler.

Office Payments.—Drs. Rittenhouse, Shoemaker, Craig, Ash, Brooks, Griscom, Darragh, Ashton, Kitchen, Somers, Fricke, Posey, Moorhouse, Crawford, Powers and Weightman, Russell, Zollar, Pancoast, Burnell, Hamilton, Horner, Demme, Meintzer, Hunt, Pepper, Field, Smith, Roberts, A. H. Smith, Fouché, Scofield, Bannon, Knox, Coad, Rachenberger, Lindsey, Halsey, Leech, Lessey, H. W. Marbourg, W. E. Barnes, Joseph Cook, Kennedy, Hooper, Shelley, Winkler, James, F. Wertz, W. B. Erdman, William Seip, Brinton, W. S. Harrah, Thomas W. Drown, J. W Kerr, J. S. Angell, Sweinhard, Stauffer, Dunlap, Traw, Reyburn, Heritage, Hobensack, W. H. Cook.

VITAL STATISTICS.

Of Philadelphia, for the week ending Oct. 12, 1861:

Deaths—Males, 108; females, 109; boys, 63; girls, 59—Total, 217. Adults, 95; children, 122. Under two years of age, 64. Natives, 155; Foreign, 48. People of color, 10.

Among the causes of death we notice—Apoplexy, 6; convulsions, 10; croup, 7; cholera infantum, 4; cholera morbus, 0; consumption, 37; diphtheria, 10; diarrhœa and dysentery, 4; dropsy of head, 7; debility, 13; scarlet fever, 8; typhus and typhoid fever, 7; inflammation of brain, 8; of bowels, 3; of lungs, 3; bronchitis, 1: congestion of brain, 2: of lungs, 1; erysipelas, 0; whooping cough, 0: marasmus, 12; small pox, 4.

For week ending October 13, 1860.....238
" " " 12, 1861.....216

Of Boston, for the week ending Oct. 5, 1861:

Deaths—Males 48; females, 39. Total, 87. Under five years of age, 50. Natives, 66; Foreign, 17.

Among the causes of death we notice—Phthisis, 10; cholera infantum, 8; croup, 0; scarlet fever, 2; pneumonia, 6; variola, 0; dysentery and diarrhœa, 5; typhus and typhoid fever, 3; diphtheria, 0.

Of New York, for the week ending Sept. 28, 1861:

Deaths—Men, 72; women, 58; boys, 119; girls, 98. Total, 347. Adults, 130; children, 217: males, 191; females, 156; colored, 6; infants under two years of age, 141. Native, 239; foreign, 108.

Among the causes of death we notice—Apoplexy, 5; infantile convulsions, 24; croup, 4; diphtheria, 5; scarlet fever, 12; typhus and typhoid fevers, 3; cholera infantum, 25; cholera morbus, 1; consumption, 47; small pox, 7; dropsy of head, 18; infantile marasmus, 38; diarrhœa and dysentery, 22; inflammation of brain, 13; of bowels, 9; of lungs, 13; bronchitis, 2; congestion of brain, 8; of lungs, 5; erysipelas, 1; whooping cough, 3; measles, 1. 183 deaths occurred from acute disease, and 108 from violent causes.

Of Providence, R. I., during September, 1861.

Deaths—Males, 51; females, 58. Total, 109. Under two years of age, 47. Natives, 90; foreign, 19.

Among causes of death we notice—Congestion of brain, 2; bronchitis, 1; cancer, 3; cholera infantum, 10; cholera morbus, 1; consumption, 20; convulsions, 3; croup, 1; cystitis, 1; debility, 3; diarrhœa, 7; dropsy, 1; dysentery, 5; diphtheria, 3; typhoid fever, 2; puerperal fever, 1; disease of heart, 4; whooping cough, 4; hydrocephalus, 3; insanity, 2; marasmus, 3; measles, 1; old age, 4; paralysis, 1; peritonitis, 1; pneumonia, 2; scarlatina, 2; suicide, 2.

The increase of mortality in the last two months over last year seems to have been from the following diseases, viz: Summer complaints, increase, 12; old age, 7; consumption, 4; whooping cough, 6: scarlatina, 3; measles, 2; disease of the heart, 8; fevers, 4; debility, 4.

Medical Directory.

Under this head we propose to give such information in regard to the Medical Colleges, Hospitals, and Societies of the City as we may be able.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr. J. F. Meigs.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Medical Clinic on Wednesday's and Saturday's, at 12 M. by Prof. Pepper; at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery.—Clinical Lectures Saturday's, at 3 P. M., by one of the Professors.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 262. PHILADELPHIA, OCTOBER 26, 1861. NEW SERIES, VOL. VII. NO. 4.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Remarks upon Lachrymal Obstructions, with a new Method of Treatment.

By T. G. Morton. M. D.,

Surgeon to the Wills Hospital, for Diseases of the Eye, Philadelphia.

Of the various forms of surgical affections implicating the appendages of the eye, none are more annoying, to both patient and surgeon, than obstructions of the lachrymal passages.

The *stillicidium lachrymarum* is generally the most troublesome symptom of obstructions of the derivative lachrymal passages, and, in by far the greater number of cases, is an accompaniment of their diseases; it may occur from tumefaction of the lining membrane of the duct, from acute inflammation of the sac itself, or of the adjoining parts, from an atonic or an irritable condition of the puncta or canalicula, or from chronic inflammation of the passages themselves, as a result of one of the exanthemata.

This *stillicidium lachrymarum* may continue for a long time without any more grave symptoms appearing, but frequently, after repeated attacks of nasal catarrh, (especially in scrofulous constitutions,) the inflammation of the mucous membrane of the nose implicating that of the lachrymal passages, leaves them in a chronically inflamed condition, and a muco-purulent secretion is the result, which collects in the duct, distending it.

In examining a patient affected with *stillicidium lachrymarum*, the palpebræ and ocular conjunctiva are generally found in an irritable or inflamed condition; a fulness is often observed over the region of the sac, and if pressure be made upon it a muco-purulent matter, mixed with tears, is forced through the puncta into the eye, which remains free from the *stillicidium* until the sac fills again, when the tears accumulate at the inner canthus, and flow over the cheek—the catarrhal condition of the conjunctiva is transmitted to the lachrymal gland, and an increased flow of tears is the result, which also adds to the swimming of the eye. If we pass into the puncta, and along the canaliculi into the duct, and thence to the nose, an Anelian probe, we are able to determine at what point the passages are strictured, and also the condition of the mucous membrane, and by the introduction of these graduated probes we are able, in some instances, to dilate the passages so that for a time the patient seems relieved, but, upon the slightest catarrh, the old stricture or irritable mucous membrane inflames, and the same process of probing and dilating is to be gone over and over again, until at last the disheartened patient is ready to leave off all treatment. In other cases acute idiopathic inflammation occurs in the lachrymal passages, this generally runs on speedily to suppuration, and the abscess opens under the tendon of the orbicularis muscle; in time this may close up of itself, and the tears flow through their usual channel to the nose, but, in by far the greater number of cases, the abscess, after discharging its contents, remains fistulous, and a constant flowing of tears, mixed with pus, is the result. Should the fistula close up, the accession of the slightest cold is sufficient to renew the trouble, and again the abscess forms and breaks, and there is a constant succession of them, especially in those of a strumous constitution, which may continue for months or even years.

Cases of fistula of the lachrymal sac, obliteration, or stricture of the duct, I have been treating with success by a modification of the old operations. The ordinary mode of treating obstructions by the introduction of the gold tube or style, is frequently of no benefit, on account of the obstructions being situated at the entrance of the canalicules into the duct, there

being, often several constrictions, and perhaps the canalicules themselves at the same time diseased, and I have often seen patients who have submitted to the operation of the introduction of the ordinary styles or gold tubes, receive no benefit whatever, the tears still collecting in the eye as before; the style relieving the strictured sac, but those constrictions above the point at which the style enters the duct, remain as before, and prevent the passage of the tears to the nose.

That form of tube which is made from ivory, the earthy portions having been removed, is introduced with the idea that, as it gradually becomes absorbed, the duct retains its original calibre, and permeability, but experience has proven that the return of the disease is in the direct ratio to the absorption of the instrument.

The form of instrument that I have of late made use of, is represented in the figure. It consists of a gold tube, somewhat tapering, and from the upper or larger extremity an arm projects at right angles, which is made perfectly smooth and rounded; the arm corresponds to the canalicule, and the tube to the duct, the instrument thus forming a direct communication from the eye to the nose, and the tears readily flowin ts course. It is as it were an artificial lachrymal apparatus. Before it can be introduced, the lower canalicule is to be split up its entire length to its juncture with the duct. This is best accomplished by introducing into the puncta and canalicule a small grooved director, and then cutting along it with a narrow bladed knife; at the point where the canalicule and the duct join, the knife is carried up at right angles, and made to pass directly into the nose, thus cutting through any obstructions; the slight flow of blood soon ceases, and the tube is then inserted, the arm resting in the split canalicule.

The introduction causes but little pain, and I have not seen, in any of the cases I have operated upon, the slightest inflammation follow; in fact there seems to be a general subsidence of the inflammatory condition of the adjacent parts; the inflamed condition of the conjunctiva and integument over the course of the duct, in these obstructions, quickly abates.

This tube can as readily be removed and cleansed as the ordinary style, should it be found necessary, and, being concealed from view, thus avoids the unsightly appearance that the ordinary style produces.

A New Method for the Treatment of Fractures and Dislocations, with Fractures in and near the Elbow-Joint.

By John Swinburne, M.D.,
Of Albany, N. Y.

The object of this paper is more fully to elucidate the treatment of fractures and dislocations of the elbow-joint, and particularly in children.

I had supposed that the subject matter of the mode of treatment by simple extension, counter extension, and maintenance of the same, had been so fully demonstrated in my paper read before the New York State Medical Society, for the year 1861, as not to require any more demonstration. I find, however, that many of the profession are still in doubt as to the mode of application. I propose not only to simplify the treatment, but also the apparatus, which can be readily made with the appliances almost always on hand. The material required is a piece of shingle, cigar-box, or any thin strip of wood readily procured.—See Plate No. 1, Fig. 3.

[Plate No. 1.]

Fig. 1. Fig. 2.

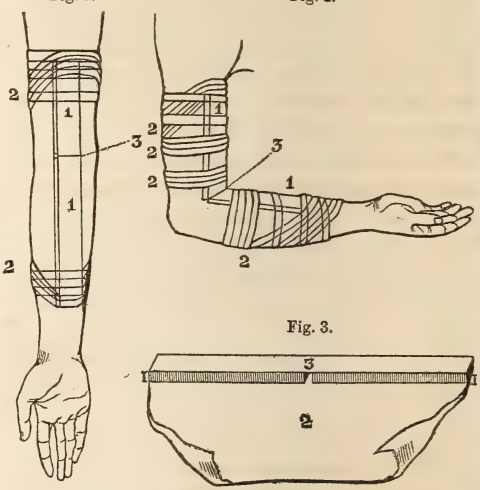


Fig. 3.

Figs. 1 and 2.

1. Splint with joint.
2. Adhesive plasters.
3. Joint of instrument.
4. Compress.

Fig. 3.

1. Board without cover.
2. Adhesive plaster.
3. Joint to be made by adhesive plaster.

Some adhesive plaster—Fig. 3, No. 2—or its equivalent, some adhesive material like Burgundy pitch, or black wax, etc., with which a piece of leather or cloth can be covered, the bits of splints encircled or enveloped, so as to form a hinge.—Fig. 1, No. 1. One end of the splint can extend to about the termination or insertion

of the deltoid muscle, and the other portion may extend to near the wrist.—No. 2, 2, Fig. 1.

This must be applied to the arm in the extended position; the ends are secured to the arm and fore-arm severally by strips of adhesive plaster, applied in a serpentine or spiral direction, to secure the ends of the apparatus from slipping up or down,—Fig. 1, No. 2, 2—then flex the fore-arm upon the arm, and the required degree of extension is affected, after which the elbow can be secured to the apparatus.—Nos. 2, 2, 2, 2, Fig. 2.

The hinge—No. 3, Figs. 1, 2, 3—can be relieved from too much angular pressure by a small compress on either side of the sharp angle, formed by the joint of the apparatus.—No. 4, Fig. 2. The flexion of this apparatus produces *extension and counter-extension* and at the same time presses the humerus posteriorly, while the radius and ulna are forced downwards, replacing the fractured bones.

As an experiment, apply the same without fixing the ends of the angular apparatus, (Day's, or the Rose splint,) with a bandage; flex the arm, and it will be found that the ends are moved up on the arm and drawn on the fore-arm, thereby losing all the extension which would otherwise be obtained by the change in the relative position of the hinge in the apparatus and the bones of the arm.

The following diagrams illustrate the principle of extension by means of this apparatus:

[Plate No. 2.]

Fig. 1.

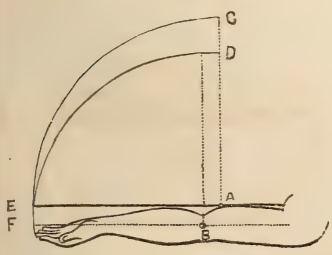
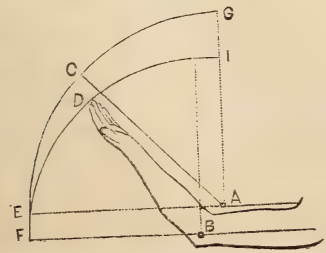


Fig. 2.



A. Fig. 1 and 2, is the joint of the instrument: B is the elbow-joint. The joint A is about one or one and a half inches above the joint B, and from one and a quarter to three inches in front of it. The end of the instrument and the fore arm extend to the same point. Now, semiflex the fore-arm, and the splint will extend farther than the fingers by the distance C D, Fig. 2, and when the flexion extends to a right angle, the difference is G I.

It is plain, therefore, that if the hand be made fast to the end of the instrument while extended, then, when it is flexed, the hand and the end of the instrument will describe the same circle, and both extend to the point G, the fore-arm being forcibly extended, the amount of extension being proportional to the diameter of the arm—in other words, the vertical distance between the joints of the arm and instrument respectively, and also the horizontal distance between them, so that, by means of this simple arrangement, sufficient extension is made to continue prolonged reductive efforts in old standing dislocations, and to keep recent ones reduced, which might otherwise be troublesome.

The principle involved may be illustrated very easily by simply placing a bit of board on the fore-arm, from the fingers to the elbow, fixing it at the joint with the other hand, and then flexing, when it will be seen that the splint extends two inches or more beyond the fingers, as seen in Fig. 2, compared with Fig. 1.

The following sketch will demonstrate the principle more fully:—

Fig. 1, No. 1, represents the distorted fracture; Fig. 1, Nos. 2, 3, 4, and 5, represents the apparatus and dressings applied; Fig. 2, No. 1, represents the fracture reduced by the flexion; Fig. 2, Nos. 2, 3, 4, and 5, apparatus and dressings.

[Plate No. 3.]

Fig. 1.

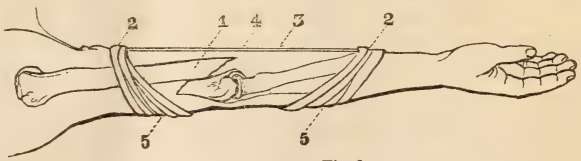
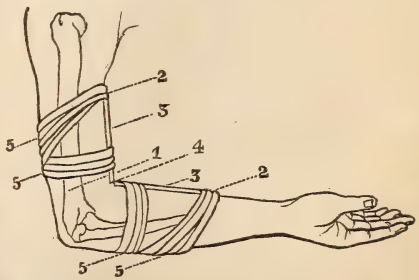


Fig. 2.



No. 1, Fig. 1 Fracture and displacement.
No. 1, Fig. 2. " " " replaced by flexion.
No. 2, Figs. 1 and 2. Extension and counter-extension.
No. 3, Figs. 1 and 2. Splint.
No. 4, Figs. 1 and 2. Joint of Splint.
Nos. 5, 5, 5, 5, Figs. 1 and 2. Adhesive plaster.

The form of accident to which this apparatus is especially applicable are those occuring in or near the elbow-joint, sometimes accompanied with distortion, and a continued disposition to recurrence of the same displacement. I will divide this form of accident into

1st. Fracture of the humerus, near and into the elbow-joint, where the spasmodic action of the biceps and triceps muscles are acting constantly as distorters.

2d. Fracture of the external condyle, carrying with it the head of the radius, and extending through the coronoid and olecranon fossæ, thus allowing the radius to become displaced, with its fragment, and drag with it the ulna which is unloosed from its natural connections.

3d. Fracture of the internal (or even both) condyles and displacement of the radius and ulna.

4th. Fracture of the ulna with dislocation of the head of the radius, where there is a constant tendency to dislocation of the radius. This was exemplified a few days since in the person of a neighboring physician who met with this accident, and it was reduced by an able surgeon; but instead of applying some retentive apparatus, he merely carried the hand of the dislocated arm over the shoulder of the same side, and maintained it in that position; subsequently radius re-dislocated; the ulna shortened leaving deformity for life.

See also case reported of old accident, Medical and Surgical Reporter, Vol. 3d, No. 11, new series.

It will be seen at a glance that the elbow-joint is surrounded by powerful muscles which are brought spasmodically into action as soon as the integrity of the joint is destroyed, and hence the absolute necessity of some antagonistic force to overcome this abnormal condition, and restore the parts to their normal position as nearly as possible, and maintain them so until union is effected. Before I had tested this plan of treatment faithfully, I must confess that the elbow-joint presented more horrible visions of bad results and suits for mal-practice than any other fracture.

The prophetic words of Prof. S. D. Gross, of Philadelphia, were constantly ringing in my ears, for if such surgeons approach this class of fracture with "doubt and misgiving," what would the young and perhaps inexperienced surgeon do? They would be bold, indeed, to approach with less trepidation.

In reference to fractures of the lower portion of the humerus and involving the joint, he says: "I know of no fractures which I approach with more doubt and misgiving than those of the inferior extremity of the humerus, involving the elbow-joint. I know of none which are more liable to be followed by severe inflammation of the synovial membrane—extensive effusion, anchylosis and deformity. Even in the more simple forms of these injuries and where the treatment has been most skilfully conducted there is generally great risk of an unfavorable result; at all events a long time will be sure to elapse before there will be anything like good use of the articulation. The prudent surgeon will, therefore, inform his patient at the commencement of the attendance, of the nature and probable consequences of the case. From five to six weeks is the average period necessary for the reunion. The nature of the deformity in badly treated fracture of the condyles of the humerus, may exhibit itself in quite a variety of ways depending upon the peculiar mode of treatment. Sometimes a posterior projection remains, caused by the displacement of the lower end of the bone backwards; not unfrequently the limb has a strangely twisted appearance, either in the direction of pronation or supination; occasionally it is permanently flexed or extended, and sometimes again the limb is greatly increased in breadth."

I will quote one case to illustaate this method by extension and counter-extension of dressings, as well as the speedy and happy results which followed:

J. Mc——, aged ten, fell from the top of the privy—eight feet—producing a fracture of the humerus, extending from above the external condyle of the humerus obliquely through the olecranon and coronoid fossæ, and effectually destroying the humeral connections of both the radius and ulna, producing great distortion. I drew the arm down to its normal condition, but found it diffiucult by ordinary means (angular splints) to retain it in its place. I then applied the apparatus, above described, when apposition of the fragments was effected. During the three weeks that the dressings were continued, the arm was not re-dressed, except that a few additional pieces of straps may have been added to keep the apparatus in its place, and during that time I saw him not more than four or five times. At three weeks all dressings were removed, passive motion allowed, and at the end of six weeks the motion of the elbow was per-

fect, though the bony callus left an appearance of deformity. My friends and myself have now treated fifteen cases of this class of accident, involving deformity of the elbow-joint, with much better results than I have been able to obtain by the mere retentive splints. This plan only requires a fair trial to be fully appreciated. It is merely the *extension and counter-extension* applied to the joint, but by a different mode of procedure.

Now, for all these accidents or results there must be some reason, and one is led naturally to inquire its real nature, and why *union is delayed five or six weeks.* Is it the close proximity of the joint? The presence of synovia? The cancelated structure of the bone? The smallness of the fragments, and its consequent slight vitality? Or, is it not rather an insufficient reduction and extension of its several parts?

If the bones were properly reduced and retained, there would be little distortion when union is complete; and certainly there is little difficulty of extending the limb to its normal condition, and when so extended, nearly all deformity ceases, and who can pretend that if this position of extension was maintained, the limb would not be quite natural, and all the deformities, above spoken of, made to disappear.

If these indications are fulfilled can any one, for a moment, suppose that "*from five to six weeks as an average period* would be necessary for *reunion.*"

The nearer the fragments of bone are in apposition the sooner they will unite, and unless bony deposit will be thrown out, there is absolutely little or no callus at the end of three months where apposition is perfect.

Lately I have had eminent surgeons examine carefully fractures of the femur, humerus, tibia and fibula, Collis fracture of the radius, and in most of them they were unable to discover any callus, or to distinguish the broken from the unbroken limb. The Collis fracture was examined by Doctor Elisha Harris, of New York, (when on a visit to this city in connection with his Sanitary Mission by order of United States Government,) and though at the time of the accident there was great contusion and distortion, no redressing from the time of the accident to the 22d day when all dressings were discontinued, union being perfect and fair motion.

Six months after the accident the Doctor examined it, and found it so perfect that he was absolutely unable to state which had been broken, there being no callus. Then, as a maxim, we can state that the less distortion, the less callus, and visa versa. So that if we can obtain absolute apposition of the fragments of bones entering into the joints, we can as well avoid excessive bony callus in this position, as in the radius, tibia, femur, or any other bone. Take for example, a simple transverse fracture without distortion, and who ever expected excessive bony callus, or a retardation of bony union. On the contrary, take an over-lapped fracture of any angle, and let it unite in that position, the union would be slow, and the bony callus would be great, and would absolutely constitute a deformity. Then to avoid deformity and immobility of joints place them in apposition as nearly as possible and keep them there until they are consolidated firmly together. This cannot be effected until spasmodic muscular contraction is overcome. There are two ways of effecting this end, compression by bandaging, and overcoming the spasm by permanent extension, without compression with bandanges. Experience tells me which of the two to choose.

The advantages of this mode of placing the fracture in place, and retaining it, can be briefly summed up as follows:

1st. The dressing (splints) is easily and readily made, and hence not expensive; and always at hand.

2d. *Extension and Counter-extension* is effected by simple flexion of the fore arm upon the arm, i.e., changing the relation of the joints of the arm and splint respectively by simple flexion. (See cuts.)

3d. It can be examined at pleasure, while lotions do not disturb the dressings.

4th. The swelling is much less than where the parts are constricted by bandaging, and if there is too much swelling, the plaster can be cut down the back of the arm so as to allow it to accommodate itself to the swelling, during the subsidence of which others can be added at pleasure, without removing the old plaster or apparatus, and hence no entire re-dressings of the limb becomes imperative; in fact, it is better not to disturb the relations of the parts, when once replaced, until union takes place, when motion is gradually made according to rules laid down in all works on surgery.

5th. The ultimate restoration of the joint to its normal usefulness is obtained much sooner,

for this reason, that there is less infiltration and subsequent inflammation where there is little pressure from the apparatus and bandages, than where compression is the means used to prevent re-distortion of the joint or fracture.

6th. The swelling which may ensue does not change the relation of the dressings, or jeopardize the vitality of the parts.

7th. There is no slipping of the apparatus from shortening and distortion of the joint, as in the case where a simple angular apparatus is used without the two fixed points designated in the annexed cuts.

Water: its History, Characteristics, Hygienic, and Therapeutic Uses.

By Samuel W. Francis, A.M., M.D.,
Of New York.

(*Continued from page* 529.)

TORTURES OF WATER.

It is not merely of the blessings that may be derived from water, but regarding its main features I would speak at length. From the ruthless man of easy virtue to the thankful peasant, human beings are aware that rain is poured upon the unjust with as equal charity as on the grateful fields of him who worships deified creations and the source of purity and excellence. Though refreshing when desired, soothing when necessity demands its aid, and ever beautiful in crystal truths or tinted clouds, the baser forms of shattered images have sought its power and employed its agency as the acme of great suffering, the most exquisite of all the tortures to be found within the scope of blackened thoughts or most depraved imaginings. Original capacities have taxed conceptive faculties beyond the heinous limits of infernal deeds. But the rapidity of dissolution in one case, the hasty yielding up of too-exhausted tissues, or the sleepy inactivity of worn-out nerves, much sooner lose the principle of giving pain than the exciting, tonic torture of a method that employs the aid of water as a HELLISH means of making sinking man recant! It has been successful when the talents of the hypocritical demoniacs have proved entirely futile by employing instruments—the filthy exhalations of decayed religion. When the rack which stretched the truth far more efficiently than feeble limbs has proved of no avail—when thumb-screws brought forth from the fragile female nought but groans—when "heretics" have burst the fetters of an earthly sacrifice, and yielded nothing but existence to depressing weights and molten lead—when slow flames coiled round the sainted martyrs, and made holy incense of their crisped remains—truth still came forth, and in the very midst of fire walked in company with pristine excellence—the three angelic attributes of man—Faith, Hope and Charity. But the sure, stealthy, silent, sweating drop of water that, for hours, with a deadly purpose, drives intensity of agony through one aching, throbbing, pin-head point of the excited brain, produces such an essence of mysterious misery; effects the nervous system with such powerful distress; calls up such lively TORTURES to the red-hot mind, that fleshy resolutions yield the knowledge that has been concealed, and secrets, locked up with tenacity of honor, shriek through the clenched extremities of clutched reality.

The devoted MARCUS of ARETHUSE, who was suspended in a basket and anointed with honey, thereby subjected to the sting of wasp and bee; calmly looked down upon his persecutors and exclaimed, "How am I advanced, despising you that are below on earth!" *

When the rack was used as punishment on persons who, alas! were only suspected of treason in Spain, besides the straining, cutting, jerking, crushing of this vile, ungainly instrument, according to the truthful record of one who survived and wrote in plain old English—"On euery one of theſe ſixe parts of my body, I was to receaue ſeven ſeverall tortures: each torture conſiſting of three winding throwes of euery pinne; which amouted to twenty one throwes, in euery one of theſe ſixe parts. Then the Tormetor hauing changed the firſt paſſage about my body (making faſt by a deuice each torture as they were multiplied) he went to an earthen *Iarre* ſtanding full of water, a little beneath my head: from whence carrying a pot of full water; in the bottome whereof, there was an inciſed hole, which being ſtopd by his thumb, till it came to my mouth, hee did powre it in my bellie; the measure being a *Spanish sombré*, which is an *English* Potle: The firſt and ſecond feruices I gladly receaued, ſuch was the ſcorching drouth of my tormenting payne, and likewise I had drunke none for three dayes before. But afterward, at the third charge, perceiuing theſe meaſures of water to be inflicted vpon me

* The History of the Martyrs Epitomized—a Cloud of Witnesses; or, The Sufferer's Mirrour—collected out of the Ecclesiastical Histories of Eusebius, Fox, Fuller, Clark, Petrie, Scotland, &c. By Thomas Mall, M. A. Boston, N. E. MDCCXLVII.

as tortures, O strangling tortures! (*his head was down*) I closed my lips, gaine-ſtanding that eager crudelity. Whereat the *Alcalde* inraging, ſet my teeth aſunder with a payre of iron cadges, detayning them there, at eury ſeuerall turne, both mainely and manually; wherevpon my hunger-clungd bellie waxing great, grew Drum-like imbolſtered: for it being a ſuffocating payne, in regard of my head hanging downeward, and the water reingorging it ſelfe in my throat with a ſtrugling force; it ſtrangled and ſwallowed vp my breath from youling and groaning." *

I have purposely quoted this account at length, with a view to lay before perusers the opinion of a sufferer himself. Besides this, the eminently quaint and curious orthography and style of expression are rarely met with in works consulted with a specific purpose. In this individual case, we see that water was the climax of his agony.

Alas! how can mortal, sinning man employ the purest of all earthly luxuries, the richest of all heavenly gifts as means of torture? How can one as liable to err, as he is whom he sacrifices, seek to injure and abuse his brother, be he e'er so wicked, lost to sense of right, or guilty of enormous crimes." During the Dark Ages—and, in fact now in some savage islands—those accused of aiding and abetting perpetrators of unlawful actions, or when too old for the fierce agonies of instrumental sufferings, were tied fast to stakes on the low beach, that their wretched fate might gaze them in the face, and add the weighty influence of sad despair to gradual destruction. As the gentle ripple rose to greet them with refreshing impulse, being fixed immovably, they met its chilling and forboding progress with exhausted silence. Now washing, gurgling and receding it surrounded them with all the horrors of approaching death. With time sufficient to recover, they drank in exhilirating air until renewed assaults exhausted their last principle of hope and yielded up their feeble frames as earnest as for a spiritual existence. In modern penitentiaries, the shower-bath produces promising results far more effectual than any of the other remedies employed as messengers of wrath or the sure instruments of punishment. The "pump," a chilling agent in the contest between honest mandates and a stubborn temper, which requires the entire labor of the convict to free his mouth from the up-welling water, conduces more to bring about a certain acquiescence to established orders than the most fatiguing tread-mill, or indeed the thorough deprivation of allowanced food.

In speaking of "La Salle de la Question," the Chamber of Torture, where the goblin acts as guide through the depraved old precincts of antiquated Avignon. A writer* of peculiar thoughtfulness gives utterance to the following: "Minutes! Seconds are not marked upon the Palace clock, when, with her eyes flashing fire, Goblin is up, in the middle of the chamber, describing, with her sun-burnt arms, a wheel of heavy blows. Thus it ran round! cries Goblin. Mash, mash, mash! upon the sufferer's limbs. See the stone trough! says Goblin. For the water torture! Gurgle, swill, bloat, burst, for the Redeemer's honour! Suck the bloody rag, deep down into your unbelieving body, Heretic, at every breath you draw! And when the executioner plucks it out, reeking with the smaller mysteries of God's own image, know us for His chosen servants, true believers in the Sermon on the Mount, elect disciples of Him who never did a miracle but to heal: who never struck a man with palsy, blindness, deafness, dumbness, madness, any one affliction of mankind; and never stretched His blessed hand out, but to give relief and ease!"

In strong contrast with this frightful aspect, and the evil uses of a precious element, let those who tolerate the windings of imagination, see the workings of all loving nature. The "clouds drop fatness" o'er the land of flowers and the marshy fens, and heaven rains down a liquid love upon the weed as well as on the "tapis vert." Night is approaching to assume the sway for Luna's precedence. The stag seeks, with the close of eve, the gentle stream to slake its thirst amid the rich luxuriant foliage; and the little birds delight, with breathless noise to hold harmonious concourse,

> "Soft and pale is the moony beam,
> Moveless still the glassy stream,
> The wave is clear, the beach is bright
> With snowy shells and sparkling stones;
> The shore-surge comes in ripple's light,
> In murmurings faint and distant moans;
> And even afar in the silence deep
> Is heard the splash of the sturgeon's leap,
> And the bend of his graceful bow is seen—
> A glittering arch of silver sheen,
> Spanning the wave of burnished blue,
> And dripping with gems of the river dew."†

* The Totall Diſcourſe of the Rare Aduentures, and painefull Peregrinations of long nineteene Yeares Trauayles, (Perſiſted by three deare bought Voyages (&c.) *coelum non animum.* By William Lithgow, Lyon, 1632.

* Charles Dicken's Pictures from Italy.
† Culprit Fay, J. Rodman Drake.

And, as the laughing ripple is noiselessly carried to the distant shore, where stands the lofty crane awaiting the approach of some minnow or too-ambitious stickleback, we look around to see if this can be an every-day occurrence for the poet's eye: and, sitting down on mossy grounds, beneath the shady elm, meditate with quiet pensiveness upon this rare embodiment of purity, the youth of nature and melodious surroundings!

In China, there exists a torture which exceeds most every wickedness from its peculiar, diabolic character. It seems to be the concentrated extract of original conception, based upon the vilest heart-thoughts. The victim of displeasure is shut up in a small room with vigilant guards, whose only duty is that of depriving the doomed man of a short second's sleep. For this purpose, they are furnished with small pins with which to prick the criminal whenever seeking sweet repose or giving signs of dull despondency. This demoniacal infliction carried out for a few days, produces exquisite sufferings and the most agonizing pains. The prostration of the nervous system soon results in a reaction, and most terrible and faithful consequences end the tragedy. There is, however, a still more distressing death, surpassing even the active delirium vigilance. It is the dying of thirst! We know, as before remarked, that two-thirds of the weight of the body is water; also that the mobility of the muscles,* is due, in no small measure, to its presences.

Where there is great activity, there, also, is abundant water;† also, that while much is secreted and passed off by the skin, kidneys, etc., an equal amount is demanded for absorption to keep up the animal economy and balance nature. Now, if the regular supply be cut off for a time from without, parts are forced to secrete an abnormal amount of water, and one organ does the work of another. Thus begins the disarrangement of the delicately systematic clock-work of the human mechanism. Though food, solid in its constitution, be administered, a difficulty in deglutition now arises. The salivary glands do not secrete with their former freedom; the tongue is dry, the lips are parched and spasms indicate an innate trouble of no small proportions.‡ The stomach now no longer furnishes the required amount of gastric juice; the lactiles droop; the peristaltic action necessary for assimilation fails. The contractile power of the slender muscles, by its dry condition, vanishes; a burning fever now ensues, the safety-valve that carried off the snrplus heat not being present. The very lacrymal glands miss their soothing ally, and the eye burns, becomes congested, and, with ruptured vessels, blood-shot. Gradually the movement of each joint is attended with great difficulty and corresponding pain.* The sinovial lubrication has ceased to lend assistance to the movement of extremities, and the absence of water in the adjacent muscles renders motion impracticable and repose equally annoying.

The cerebellum, presiding over the impulses of the body becomes seriously impaired by sympathy and for want of this fountain of life, and refuses to perform its accustomed sentinel duty. Volition and action are separeted. The optic nerve plays false, and, in the place of arid plains and sandy soil, and desolate expanses of wild wastes, the longed-for, green oasis looms up in the distance, is now close at hand, and soon pure streams of cool, refreshing water theoretically soothe the dying man, reclining in sequestered nooks, surrounded by umbrageous foliage. Mysterious! this connection in the human mind between desire and possession. Ere death advances to claim what has really been his for some time, the senses seem to make one final effort to form out of their disordered remnants that which they most need. Reliable sojourners, who have traveled much and been subjected to a similar condition, bear convincing testimony that there is nothing in the annals of all earthly tortures that can equal the asthenic direful results of want of water! The inability to even speak, the crackling, faint, syncopic and desponding hours that have galled their spirits and consumed their frames! How effectual was the sad punishment of Tantalus! How awful the just retribution of a Dives in the other world!

To be Continued.

—o—

Cooked Meat for the Laboring Classes.—A great cooking depot has recently been opened in Glasgow for the sale of food at a remarkably cheap rate, and has become an extensive affair. The shops and saloons now number six. During one week the number of rations sold and consumed amounted to upwards of 20,000.—*Med. News.*

* Dumas' Principes de Physiologie, tom. ii., and Pathology of the Human Fluids. By Dyckman.

† Johnson's Animal Chem. & Schwenke, Hæmatologia.

‡ See the views of the learned Dr. Beaumont, and the investigating M. Chossat.

* The experiments of Valkmann, Wernscheidt, Müller, Longet, Bischoff, and M. Bernard, testify sufficiently to the sad consequences of prolonged and unalleviated thirst.

Vesico Vaginal Fistula.

By D. Hayes Agnew, M.D.,
Surgeon to the Philadelphia Hospital.

Case 5.—Ann Halley, a native of Ireland, aged thirty-three years, and a resident of Delaware county, Penna., was admitted into the Philadelphia hospital on the 24th of January, 1861, suffering from a vesico-vaginal fistula, situated at the upper extremity of the vagina, near the cervix uteri, and running oblique to the longitudinal axis of the canal. About ten months before her admission into the institution, she had been delivered, by instrumental means, of a child, after a tedious and difficult labor of thirty-six hours. A few days succeeding this, she discovered her urine dribbling away without being able to exercise any control over its escape. As the woman's health was, by no means, in a condition to insure the success of an operation, the first attention was directed to its improvement; and which, under the employment of mineral tonics and good diet, was very soon in a great measure restored.

In the succeeding month (February) the operation for her relief was performed. Her bowels having been opened the day previous, and an opiate administered, the patient was placed under an anæsthetic of ether and chloroform, and turned on her abdomen across a stool, well protected with a soft pillow. The parts being exposed by the lever speculum of Sims, the edges were now seized by a pair of long bladed rat-toothed forceps and carefully paired in a bevelled or oblique form. After the bleeding had subsided, four silver sutures were carried through the opposing margins of the opening. After satisfying myself of their proper disposition, their ends were passed through a small opening on one end of the forceps; the latter being carried down to the fistula, and traction successively made on each of the wires, its margins were very accurately approximated. This done, their ends were next run through a wire twister, and, by turning the instrument between the fingers, the sutures were firmly secured over the line of the wound, the edges of which were drawn together with great neatness and satisfaction. The twister being withdrawn, the wires were cut off quite close to the wound and the ends turned down, so as not to irritate the posterior wall of the vagina. The woman being placed in a bed, a catheter was carried into the bladder with a flexible tube secured to one end, in order to carry the urine into a bottle placed in a bed, between the limbs of the patient.

A nutritious but light diet was allowed, and, for the first two days, a pill morning and evening administered, containing half a grain of opium, after which the amount was reduced to one-third of a grain, twice daily. Attention was also given to the catheter, removing it twice daily in order to clear away any mucous or blood which might adhere to the instrument, and impede the escape of the urine. The case progressed without any unfavorable symptoms whatever, and on the eighth day following the operation, the sutures being clipped out, the cure was found to be perfect. The woman was retained in the house for nineteen days longer, a measure of precaution, the first four of which she was compelled to wear the catheter.

Illustrations of Hospital Practice.

UNVERSITY OF PENNSYLVANIA.

Oct. 16, 1861.

MEDICAL CLINIC.

Service of Dr. Pepper.

HÆMOPTYSIS.

This case was a woman, thirty years of age, married; general health good; catamenia regular; has been three months unwell; got a blow upon her head sometime since, which made her nervous; no cough until last week, when she coughed up some blood, florid, frothy; on Friday last raised in this way one pint or more, on Sunday and Monday, yesterday not so much, to-day a little; no constitutional predisposition to disease of the lungs; has lost flesh; has fever in afternoon, chills; no night sweats; auscultation reveals slight physicial signs; sonorous râle on left upper portion of lung; right lung normal. This is probably a case of hæmoptysis, the hemorrhage proceeding from the left lung in its upper portion. It may come from the throat, or from the stomach, yet its florid, frothy character denotes it to be from the lungs. Hæmoptysis is often exceedingly serious, indicating the existence of tubercular deposits in the lungs; occasionally when these deposits produce congestion hemorrhage will prove a temporary relief; it is more ominous in a male than in a female; in the latter it may be vicarious, but that is not the condition of this patient, her catamenia are regular; it may also arise from disease of the heart, but here auscultation will reveal the exact condition; or it may arise from an altered

condition of the blood of a scorbutic character. The prognosis in such cases is favorable. In this case there are probably tubercles disseminated in the lungs, and though the strength of the patient is not yet materially affected, yet, unless the hemorrhage be promptly checked, the system generally will, sooner or later, suffer.

The best remedy for such cases, and one which has, in my opinion, a somewhat specific effect in hemoptysis, is turpentine, and I should advise the administration of twenty drops of that article three times a day, to be continued till it produces slight strangury, then drop it and commence again when that has disappeared. The following mixture which will act as an anodyne, tonic and astringent, may also be given in teaspoonful doses four or five times a day, viz: morphia 1 gr., aromatic elixir of vitriol, 1 drachm; water, 4 oz.; sinapisms may also be applied over the chest at night. Under this treatment I look for the arrest of the hemorrhage, and for the improvement of the patient. If, however, constitutional treament be required, the tincture of iron and bark with nourishing diet will be the proper remedial course to pursue.

EPILEPSY.

A girl, eleven years of age, born of healthy parents, neither of whom had any hereditary taint; two years since first attacked with convulsions; screams out, falls down senseless and convulsed; does not foam at her mouth, but bites her tongue; turns livid in the face; after a few moments the spasms cease and she falls asleep; is not conscious of them when she wakes; sometimes has four or five in a day: sometimes occur in the night; memory impaired; appetite good. In cases of this kind it is important to ascertain, if possible, the cause, as that being determined, the remedies can be appropriately applied. In this case no satisfactory cause can be assigned. Sometimes epilepsy results from a depression of the bones of the head, or the protusion of a spicular of bone into the substance of the brain. An examination of the head in this case reveals no depression of this character. It is sometimes hereditary, but no hereditary taint is discoverable here, the parents are both healthy. Worms are sometimes its cause. I recall to mind a case that came under my own observation in which the discharge of a tape worm relieved the patient entirely from the epilepsy. It is not improbable that worms may be the cause in this instance. We will, therefore, give her eight drops of the wormseed oil upon a lump of sugar three times a day for three days in succession, upon an empty stomach, to be followed by a dessert spoonful of turpentine on the evening of the third day. The wormseed oil has some tonic properties, and is an excellent remedy in this case.

PHTHISIS PULMONALIS.

This man is thirty-four years of age, temperate; has used tobacco freely; uses none now; appetite good. bowels regular; no hereditary diathesis; has been nine months unwell; took cold at that time from exposure to heat and cold while working at his trade; has fever, chills, and night sweats; loses flesh and strength; expectoration copious of a white, thin appearance; has ulceration of the larynx; worked up to Saturday last. The physiognomy of this patient would reveal his disease without consulting general symptoms, or resorting to ausculation or percussion. These all add confirmation to the diagnosis, and show it to be tuberculosis. The prognosis in his case is unfavorable. Regarding the inhalation of medicated vapor as better than any other method of applying remedies to the locality of this disease, he may inhale the following mixture three times a day, five minutes at a time:

Lugoll's solution of iodine, ½ drachm,
Water, ½ pint.

His diet may be nourishing, and for constitutional remedies he should take iron, cod liver oil.

Oct. 19, 1861.

CHRONIC COLITIS.

This man is 27 years of age; a laborer on the railroad; five months sick; had measles, during progress of which diarrhœa set in; discharges very frequent during the day, at first bloody, now thin and light in color; no tenesmus or pain; no pulmonary difficulty; no cough weak and somewhat emaciated; has been under medical treatment; was directed to eat light food; had some medicine given him, and took brandy and water. In measles we sometimes have a pulmonary tendency, but in this case the lungs are free, whilst the mucus membrane of the colon seems to have been the point of attack, and this unattended with the peculiar dysenteric pain usual in that affection. The inflammation is chronic. Diarrhœa also sometimes attends phthisis, which may be the result of ulceration of the intestines, or especially of the colon, but this is not the case here; there is no hereditary diathesis. Hence we conclude it to be chronic colitis. The treatment in such cases may be various. Remedies by the stomach are of the least value, because of the remoteness from that organ, of the disease, and of the fact that but a small portion of the remedy can reach it through the round it must necessarily travel. As an internal remedy, we will give one of the following pills three times a day, viz:

Nitrate of silver, - - 7 grs.
Opium, - - - - 7
Divide into 30 pills.

Injections may also be used, and may be composed of nitrate of silver, acetate of lead, or sulphate of zinc. In this case it may be sulphate of zinc 2 grains, laudanum 10 drops, given morning and evening. A liniment composed of croton oil 1 part, olive oil 2 parts, may be rubbed upon the abdomen, till the peculiar eruption of the oil is produced. The croton oil will not produce its specific effect in such cases, but will act as an irritant to the surface. Let the diet be of a light farinaceous character.

CHRONIC PNEUMONIA.

This case refers to a man 23 years of age; a painter; ten and a half years ago had bilious fever, afterwards typhus, and then intermittent; chills and fever every other day; about ten weeks since trouble about chest commenced, with soreness in right side; has a cough; expectorates most at night; portions of sputa white as milk, portions natural; is very weak; walks cautiously; stoops; greatly emaciated; anœmic; easily out of breath from the least exertion; vomited dark clotted blood at one time; no hereditary taint. The peculiar features of this case are that the disease is not in that portion of the lung usually affected first. In the upper portions of the lung respiration is fair, and resonance good; in the lower portion of the left lung we hear the mucous râle, and this is the seat of the disease. Is it simple inflammation or is it tubercular? I fear the latter. If so the tubercles are in the lower lobe of the lung. The digestive powers are enfeebled; nutrition is imperfectly performed; inflammatory action has assumed a chronic form. The prognosis is unfavorable. The indications of treatment are to restore strength, and give tone and energy to the system. This may be done, perhaps, by the administration of iron and bark, as internal remedies, together with a good nourishing diet. We may also apply the iodine ointment over the affected lung, as a local application.

PLEURO-PNEUMONIA.

This is a child six years of age; of healthy parents. In January last was suddenly taken with a very severe pain in right side, for which she was under medical treatment; coughs some; has fever; appetite variable. A peculiarity of this case is, a marked depression of the right side, a marked curvature of the spine, and also a depression of the right shoulder. There are evidently adhesions of the pleura, and the lung itself is implicated; it is hepatised, the result of inflammation of the pleura, extending to the substance of the lungs. The indications of treatment are the same here as in the last case, and we will give one-third of a tea-spoonful of Huxham's tincture of iron, with three drops elixir of vitriol, three times a day; also cod liver oil a tea-spoonful. If the cough be troublesome, give one-third tea-spoonful of paregoric. Let the diet be nourishing.

CONVULSIONS FROM DENTITION.

A child, 23 months old, up to eight weeks ago healthy, was taken with violent convulsions, which continued constantly for three weeks; the child is now paralysed; no power of locomotion; loss of speech; eyesight unimpaired; is apparently imbecile; keeps its hands and its head in constant motion, and gazes about with a vacant stare. We have here the result of reflex irritation of dentition upon the brain, and, probably, an effusion of blood or fibrin at the base of the brain. The prognosis is not unfavorable; the child is young; the deposit or effusion may be absorbed, and the brain be relieved of the pressure upon it. But in the treatment, care must be taken in regard to internal remedies. The remedial powers of nature, in cases of this character, are great, and some would, perhaps, trust to nature entirely; but the judicious administration of the proper remedy will, I think, aid nature in restoring the deranged functions. I should, therefore, advise the use of iodide of potash, in doses of half a grain, three times a day, believing this to be the remedy required. And further than this I should not go at present; it is too early in the case to give other medicines.

SURGICAL CLINIC.

Service of Dr. Agnew.

October 19, 1861.

NECROSIS OF HUMERUS AND BONES OF FORE-ARM.

This was the case of a child that somewhat more than eight months since met with the accident of a needle passing into its left arm, soon after which an abscess formed which has spread among the muscular tissue of the arm, forming new sinuses in various directions, and new openings for the discharge of matter, till now there is anchylosis of the elbow, and redness and swelling commencing about the shoulder which probably involves also that joint. Above the elbow, the sensation of roughness is communicated to the probe which indicates that the bone is necrosed; at the elbow it passes into the joint, and imparts the same sensation, and also below upon the fore-arm. The whole bone is affected, evidently resulting from the accident of the needle. In its wandering course it must come in contact with nerves and tendons, and insinuate itself among the muscles, irritation and inflammation of course followed, and the probable destruction of the entire bones of the arm is the result, if not something further. The treatment proper to have been pursued in the commencement of

this affection undoubtedly was to hunt for the needle, and though the search might have been fruitless, still free incisions should have been made in the arm so as to have given free egress to the accumulated matter. All we can now do is to wait, using those remedies meanwhile which seem best adapted to sustain the strength of the little patient. For this purpose we will give the child tincture sesqui chloride of iron, three to six drops two or three times a day. A flaxseed poultice may be applied to the ulcerated arm. Proper attention should also be paid to diet.

It is a matter of consideration whether the arm should not be amputated at the shoulder joint. It may be doubted whether a healthy flap can be made below.

SYPHILITIC ULCERATION OF THE SOFT PALATE.

Eight weeks since, this young woman had an abscess of the throat, which was lanced, and discharged matter. Since that time she has had difficulty of articulation and a peculiar intonation of voice indicating some disease of the palate. As I look into the throat, I observe an orifice extending completely through the palatine arch, which is encrusted with an ill-conditioned secretion. This ulceration is undoubtedly the result of secondary syphilis. The system has become invaded with a disease which was at first local in its character, and now exhibits itself in this instance in an attack upon the glands of the throat, and upon the palate. The treatment to be pursued in this case is to apply to the ulcerations a mixture of nitrate of silver 7 or 8 grs. to the ounce of water The digestive organs should be carefully attended to, and the following preparation may be given three times a day.

℞. Potass. iodid. gr. ij.
Hyd. Chlor. Corrosiv. gr. 1-16. M.

SYPHILITIC NODES.

This case was a female, who presented herself on account of two protuberances upon her forehead, the swelling from which extended down each side of the nose. They are tender to the touch, communicate a doughy feeling or an obscure sense of fluctuation to the fingers, are commonly attended with severe pain, and consist of an effusion of lymph between the periosteum and bone. As they proceed, unarrested, the bone becomes carious, matter forms between it and the periosteum, extensive exfoliations ensue, and the patient suffers severely from the pain and discharge. This, like the former case, is, without doubt, the result of syphilitic affection. Its ravages are nameless. Peculiar to the human race it clings to man when once it has invaded the system, and renders life almost a curse. The treatment which will give the best promise of success in this case is, painting with tinct. of iodine, or perhaps a subcutaneous section of the periosteum. The constitutional treatment may be the following mixture three times a day, together with due regard to the digestive organs and to diet. Iodine, six grains in syrup sarsaparilla.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

UNUNITED FRACTURE CURED BY EXCISION AND SILVER WIRE, AFTER STANDING TWENTY-SEVEN MONTHS.

In the *North American Medico-Chirurgical Review*, for July, Prof. S. D. Gross relates an interesting case of fracture of the humerus, possessing points of interest which we shall copy here. The patient was aged thirty-two, and of dissipated habits. For more than three weeks the arm, which was broken three inches above the elbow, was not dressed. Then, in consequence of extensive suppuration, no retentive apparatus could be applied or retained, and ununited fracture was the result. Twenty-seven months after the accident, Prof. Gross operated: "after chloroform had been administered, a straight incision, about four inches in length, was made through the posterior portion of the triceps muscle, exposing at once the membrane which had encased the fracture. On severing this, it was found that the oblique extremities had been rounded off and become incrusted by semi-cartilaginous tissue, so as to form a very perfect false joint, which was lubricated by an abundant, thin, glairy fluid, though nothing like a synovial membrane could be detected. They were each in turn brought through the opening thus made, and cut off at right angles by means of a delicate saw introduced behind them. It was necessary to take about half an inch from the lower fragment, and nearly three times as much from the other. One ligature, made of three strands of the usual sized silver wire, was passed horizontally through each section of bone, and another diagonally across the edges, which, after having been tightly twisted, were cut off short, and the ends bent up so as to lie close beside the body of the hu-

merus. The incision through the skin was then approximated closely with interrupted sutures, and the whole arm placed in well-padded curved splints of binder's board."

Notwithstanding, phlegmonous erysipelas attacked the arm, compelling the removal of the splints, it is yet said, "there is every prospect of his having a strong and useful limb."

GLEET TREATED BY LOCAL REMEDIES.

In the *North American Medico-Chirurgical Review*, for July, Dr. Wm. C. Otterson, of Brooklyn, New York, has an article on the treatment of gleet by local remedies. He believes that the glans penis and the lacunæ therein, are the real seat of this affection," and that local means are quite adequate to the cure of the gleet. His plan is thus given, "I introduce a No. 8 metallic grooved bougie, which is applicable to most cases; the sizes may vary from No. 6 to No. 10, the groove being filled with citrine ointment or calomel; the latter I prefer, as being more certain in its action. The instrument need be passed only a sufficient length up the urethra to get the point beyond the glans penis, when it should be carefully revolved several times. It should be allowed to remain in for three, four, or five minutes; and then a probe, adapted to the curve of the instrument, should be passed down the groove; if they are withdrawn simultaneously, then the whole of the calomel or ointment will be left in apposition with the parts. This may be repeated twice or thrice a week, at the same time that the bowels are kept soluble. Upon withdrawing the instrument, a little smarting may be complained of, and perhaps a few drops of blood issue, but this is not important. If this plan of treatment is followed assiduously, the patient may be assured, with much confidence, that a very short time will be required to remove every trace of the most obstinate and hitherto intractible gleet." Of his own experience he thus says: "since I have become convinced that benefit *can be derived only* from direct alterative medication to the seat of the disease, and have pursued the plan of treatment laid down in this paper."

Dr. Otterson does not allude to the fact that this treatment has been previously employed; but certain are we that the treatment of gleet by means of the local application of medicines, by means of bougies, is not a new idea. As the subject is an important one, and the practice should be generally known, if it is not already, we copy the following from Dr. F. J. Bumstead's lectures on Venereal, delivered at the *College of Physicians and Surgeons*, of the *University of New York*, and published in the *New York Journal of Medicine*, during 1859. We copy from the November number for that year. Speaking of bougies, he says:—"They are highly recommended by the most eminent writers on venereal, and, in my own hands, I have found them unsurpassed by any other method of treatment."

After citing under what circumstances they *may* be *injurious;* he adds:—"With this exception, the passage of the bougie may be repeated every second or third day at first, and afterwards every day, or in some instances as often as twice a day. The length of time requisite for a cure by means of bougies, varies in different cases. As examples of their successful employment I may mention one case recently under my care, a gleet of four years' standing, which was treated with the tincture of the chloride of iron internally, and the introduction of bougies every second day, and in which a cure was effected in two weeks. In another case, a gleet of nine months, the discharge disappeared in three weeks under the use of the same means. Other similar cases might be mentioned, but such satisfactory results cannot by any means be expected in every case. In many, this treatment must be continued for several months, or other measures, as injections and blisters, be resorted to."

That *medicated* bougies are meant, the following will attest:—"Bougies may be medicated in various ways. Calomel rubbed up with sufficient glycerin or oil to cover it, forms a very cleanly and excellent mixture with which to annoint the bougie, and I think materially assists the curative action. Mercurial ointment may also be used, either alone or combined with extract of belladonna, the latter being added in case the urethra is irritable.

℞. Unguenti hydrargyri, ℥ss.
Extracti belladonnæ, ʒss. M.

When it is desired to stimulate the mucous membrane, we may employ the diluted ointment of red oxide of mercury, or an ointment containing a few grains of nitrate of silver, but these stimulants should not be continued for any length of time, lest they keep up the discharge.

℞. Ung. hydrarg. oxidi rubri, ʒj.
Adipis, ʒiij. M.

℞. Argenti nitratis, gr. v-x.
Adipis, ℥j. M.

AN INTERESTING CASE OF DILATATION OF THE URETHRA FOR THE REMOVAL OF A URINARY CALCULUS.

In the *North American Medico-Chirurgical Review*, for July, Dr. J. Taylor Bradford, of Augusta, Kentucky, reports an interesting case of the removal of a urinary calculus, in a *child two years of age* only; the stone measuring *one inch and three quarters* in circumference, being removed by forceps through a dilated urethra.

We are not informed how long a time was requisite to make the necessary dilatation—only that a bougie was inserted every second day, increasing in size at each insertion.

Strange as it may seem, he said that on the next day after the removal of the stone, the "little patient had complete control of the bladder, passing her urine at will."

The doctor thus expresses his confidence in similar operations:—"Now I believe, in the adult female, with care and caution, a stone *three inches in circumference* might be removed without the use of the knife."

STOMATITIS AND PHARYNGITIS.

Prof. A. Jacobi, of the *New York Medical College*, in his course of *Lectures* upon *Dentition and its Derangements*, now being published, treats fully upon the above-mentioned subjects, as upon all others connected with his subjects. We have not space to quote largely, as we would like, but will allude to one or two of his opinions, and give his practical remarks. He believes stomatitis and pharyngitis are wholly unconnected with dentition, though they both occur largely in early life. Pharyngitis, however, he believes is frequently complicated with, and in fact is even dependent on, the existence of stomatitis. Of pharyngitis, he says:—"And, finally, I desire you to remember this caution, viz: to examine the pharynx of a child, at least in every case in which the diagnosis is doubtful. By doing so you will not only reduce the number of uncertain diagnoses, but you will reduce the number of cases of "difficult dentition" considerably. You will often find pharyngitis, with or without stomatitis, to be the simple and easily removed cause of many serious troubles attributed to dentition."

In stomatitis, he urges the use of the chlorate of potassa, or soda, and proves that it acts but little, if any, locally, and this fact he urges in proof that it is a constitutional disease, and not dependent upon dentition. Of pharyngitis, he says, "as to treatment, I should again urge the administration of chlorate of potassa, or soda, both internally and locally. I have not seen better results from any other medicine in any case which was not past the possibility of absorption."

The above opinions have our cordial commendation, though we admit that may not add to their force. For quite a number of years we have used but little or no other medicine in stomatitis, or in pharyngitis, but the chlorate of potash. In certain cases, we grant we have added to the solution a little *muriate tinct.* of iron, and, when the cases are judiciously selected, we believe it to be one of the most valuable additions that can possibly be made. All the mouth washes that old ladies and fifth rate physicians rely so much upon, are extremely insignificant in comparison. Chlorate of potash will do more, in such cases, in a week, than borax and gold thread will do in a month.

UNRELAXING OS UTERI.

In recent Nos. of the *American Medical Times*, Dr. Ezra M. Hunt, of New Jersey, has a couple of articles upon *minor midwifery*. We have already called attention to his first paper, and we wish to refer to an idea or two in his second that we consider of the first practical importance. We quote from the *Times* of Aug. 31st. He says, "we not unfrequently meet with cases in obstetric practice, in which the os seems indisposed to yield before the influence of pains, and although these are frequent, persistent, and severe, little or no progress is made." Blood-letting, antimony, veratrum, &c., are considered, and then he says, "but in this class of cases we regard *morphine* as more generally applicable than either of the others; not only as relaxing the rigid os, but as suspending temporarily ill-directed pain which sometimes seems to irritate and exhaust the uterus rather than facilitate progress; it prepares it to resume its power with more efficient aim." Now we believe here is an important practical fact that is not sufficiently appreciated. We believe that when the pains are "frequent, persistent, and severe," if caused by *natural uterine contractions*, the os will readily relax in ninety-nine cases in a hundred. When pains are "frequent, persistent, and severe," and the os does not relax, it is, to our mind, proof almost positive that the pains are irregular, muscular, spasmodic, or neuralgic. In either case, opium or morphine is the all-important remedy. Early in our practice, we saw several cases of unrelaxing os uteri, before what seemed to be sufficiently frequent and severe pains. When the patient became exhausted and applied for rest, we gave her morphine for that purpose, with the intent of suspending pain for an hour or two. In several instances, while waiting for the pains to subside that we might leave to take rest ourself, or to attend to other business, we found the pains to *gradually increase in severity and the length of their duration*, and the os to soften, relax, and yield, as in natural labor. Such results were novelties to us. Our limited reading did not furnish us such cases. We began to reflect and to study such cases to the best of our abilities, in the light of our limited experience. We came to the following conclusion, which we believe to be correct, and commend them to those who have been in the habit of bleeding, and giving antimony in all such cases, viz: when the non-dilatation or unrelaxation depends upon *irregular uterine contractions*, opium is the remedy. And in such cases, the pains *do not cease*, though they become less aggravating—the duration of the uterine contractions gradually lengthen, as the influence

of the opium is felt, become more efficient, though less dreaded and tiresome to the patient, and the os uteri softens and dilates without further resistance. If the pains are *spasmodic or neuralgic*, and consequently inefficient, so far as dilatation of the os and the progress of labor is concerned, opium then is the remedy. But, in such cases, probably, under its action, the pains will *cease for a time*, and when they return they will be regular and efficient.

PROLAPSUS OF THE UMBILICAL CORD.

In the same paper just referred to, Dr. Hunt expresses the opinion that there are certain cases in which Dr. Thomas' postural treatment, from non-submission on the part of the patient, or from other causes, is not effectual. The old plan of pushing and hooking it up was never effectual in any considerable number of cases. In cases where neither of these plans are effectual, he would give ergot in full and efficient doses, so as to lessen the period of compression upon the cord. In these cases, and under such treatment, the delivery is hastened, and, though the child may be born asphyxiated, by judicious management it may escape unharmed. For the treatment of asphyxia in such cases, we beg leave to refer to the Reporter for July 27th. We think the cases where Dr. Thomas' plan of postural treatment must necessarily fail, are very few. Where it does fail, then the advice of Dr. Hunt to give ergot, is eminently judicious.

SYMPTOMS OF APPROACHING DEATH FROM CHLOROFORM.

In the *American Medical Times*, for Aug. 31st, Charles Kidd, M. D., writing from London, says: "It is well established now in Europe, that death by chloroform begins by a sort of spasm or stoppage of the action of the respiratory muscles; these should be watched. The first dangerous symptom in the administration of chloroform, is *a protrusion of the eye-balls*, and a state of the patient as if in a trance, or *state of religious ecstacy;* the respiratory muscles are stopped, the heart still beating vigorously. If this state be neglected, the respiration having stopped, the right side of the heart becomes engorged, and subsequently the heart stops by distension of its cavities; tracheotomy, as in the Crimea, done on the instant, has saved such a patient, but usually, if danger seem impending, fanning cold air on the face, and removing the patient more into the open air, succeeds."

INFANTILE VOMITING.

In the course of lectures by A. Jacobi, upon Dentition and its Derangements, now being published, we find some very interesting remarks upon infantile vomiting. He does not believe that this troublesome symptom in children is often connected with dentition. In regard to its nature, he says: "The nature of the undigested contents of the stomach brought up will frequently explain the cause of vomiting. When milk is vomited, coagulated, immediately after being taken, it shows that either the milk or the stomach contained free acid. It is of some practical importance to know that this occurrence may be usually avoided by adding a small quantity of bicarbonate of soda, besides a little chloride of sodium, to each meal. When the milk is vomited some time after it is taken, in a state of loose coagulation, it proves that the condition and function of the gastric juice are normal: when, on the contrary, it comes up again after some time has elapsed, uncoagulated, there is either a want of gastric juice that requires the administration of pepsin, or, if the caseous matter looks like tough mucus, there is evidence that chronic catarrh is present, in which case pepsin is of no use. Vomiting due to the condition of the stomach and the ingested food, is most frequent, and it may be safely stated that such cases depend upon organic disorders of the stomach, when the vomiting occurs while the stomach is filled. Cases in which vomiting occurs with an empty stomach will prove obstinate, as they depend on some anomaly of the nervous centres; thus, for instance, in cerebral tumors, exudative processes, or in vomiting occurring in the first stage of many diseases attended with fever." He makes an interesting remark in regard to vomiting in tubercular meningitis, viz: "The difference found by me hitherto, and which I hope to verify by further experience, is this—that vomiting is a regular symptom in tubercular meningitis of the base of the brain, while it is the rarer the less the basis is affected."

Prof. Jacobi makes some very interesting remarks upon that ever important, but much talked about subject—artificial diet for infants. We quote the following:

"Some hints on the use of milk, on which infants ought to be fed almost exclusively, in regard to the affection alluded to, may be of some practical importance, and deemed worthy of your notice. I shall be brief in adding them. Always use cow's milk as fresh as you can. You cannot always expect milk, even in the ice-box, to keep from one morning to the next. Boil the milk, to postpone the transformation of the sugar into acid. Diminish the amount of sugar to be added to cow's-milk in acid secretion of the stomach. Where there is the least suspicion of acidity, add a small quantity of bicarbonate of soda. Where there is the least suspicion of acid secretion in the

stomach, add some vegetable slime (barley, oatmeal, arrow-root, according to circumstances), to prevent rapid and hard coagulation. The regular addition of chloride of sodium to every meal will also add to the digestibility of the food. Never use swill-milk; never give milk undiluted; never consider milk as a beverage, but always as food; give water when infants are thirsty, and never give food while they are still well oftener than once in two hours, in the first month of life; never oftener than once in three hours, after the first or second month. Make the intervals longer in case of catarrh in the stomach, which diminishes the digestive power. Never regard the violent screaming of an infant affected with gastric catarrh as indicating hunger; they will sometimes appear to be voracious, mistaking the disagreeable feeling of the peripheric ends of their vagus nerve for the sensation of hunger. Keep the affected organs of digestion from over exertion, as you would a sore limb."

—o—

ON THE ELIMINATION OF MERCURY FROM THE SYSTEM.

Dr. Schneider has recently made some researches on the elimination of mercury during and after a mercurial treatment, which have given the following results:—During the internal administration of such preparations, the electrolytic examination of the urine shows always traces of mercury, but the quantities are so small that the amount of urine discharged within twenty-four hours is often not sufficient for a satisfactory result, and the metal must be searched for in the whole of the urine discharged within three to six days. Traces of mercury were also found in the urine of a patient who had not taken it internally, but had been treated with mercurial ointment. The elimination of the drug by the urine lasts for some time after the mercurial treatment has been discontinued. In the first week afterwards it is invariably found, and in two cases it was even discovered in the fourth and the sixth week afterwards. After six weeks Dr. Schneider has never succeeded in discovering traces of mercury by electrolysis. The elimination is not promoted by the administration of iodide of potassium, as the quautity of mercury contained in the urine was not at all increased, but rather diminished, when that drug was given; and if it was taken a few months after the end of the mercurial treatment, mercury did not re-appear in the system, probably because nothing was left behind. One patient who had suffered from syphilis for five years, and had been three times treated with mercury (the last time very energetically, having used twenty drachms of ointment, equivalent to more than 120 grains of mercury,) died of pericarditis two months after the third course, and Dr. Schneider could therefore search for mercury in the internal organs. The result was that the bones, the brain, and the spleen, which were generally believed to retain mercury for years, did not contain a trace of it, while the kidney showed an infinitesimal quantity of the metal, the result of the examination of the liver being doubtful. It is, therefore, evident that mercury entirely disappears from the system a short time after the end of treatment, and cannot, therefore, cause secondary syphilitic symptoms; nor can it be eliminated from the system years after the treatment by Dr. Caplin's electro-chemical baths. In two cases of hydrargyrosis considerable quantities of mercury were discovered in the urine, and in one of them, which ended fatally, also in the internal organs, especially in the liver. Urine which contains mercury does not necessarily contain albumen also; but in the two last mentioned cases of hydrargyrosis there was albumen in the urine. The saliva which is collected during a mercurial treatment does not contain any mercury. The quantity of mercury which is eliminated after the end of the treatment amounts to about one-fourth of that actually administered.—*London Medical Times.*

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, OCTOBER 26, 1861.

INAUGURATION OF BELLEVUE HOSPITAL MEDICAL COLLEGE, NEW YORK.

The ceremonies connected with the inauguration of this college took place on Wednesday of last week, and altogether, it is said, formed one of the most pleasing and interesting ceremonies that has been witnessed in the civil walks of life since the war began. It was largely attended by distinguished citizens of the city, their wives and daughters. The inauguration of a new Medical College was a new thing under the sun, and connected with a time-honored and celebrated institution, as it was, it attracted a crowd from every sphere of public service, surpassing, in this respect, the warmest anticipations of the friends of the nascent college. The guests were so numerous that the steamer *Bellevue*, chartered for the occasion, was insufficient to accommodate the throng, and an additional steamer had to be provided. The delay occasioned by this circumstance was employed in an inspection of the wards of the hospital, which contains beds for 1,200 patients, and where, during the year 1860, no less than 11,411 cases of disease were treated. During

the inspection, a patient was brought in with a leg so seriously shattered as to require amputation, which was promptly performed by Dr. James R. Wood. The thousand guests then embarked to make the tour of Blackwell's and Randall's Islands. The excursion was much enjoyed; everything was found neat and trim, and extensive improvements in grading and building were progressing under the hands of penitentiary laborers. Human misery, in some of its most horrible forms was observable on every side, but the sadness of the scene was relieved by the surrounding evidence of devoted care and consummate skill. At Randall's Island, the boys, to the number of 500, were out in military array, and two of them made speeches of welcome. There is an asylum on this island for idiotic children, which already has 44 of these unfortunate little ones. It was quite 4 o'clock before the large company disembarked at the College, and the doors of the lecture-room were scarcely opened before every seat and standing point was crowded. The crowd seemed in excellent spirits, and no little amusement was created by the attempts to open the sliding doors between the audience and the distinguished gentlemen upon the platform, who were taking a lunch inside, previous to the commencement of the inaugurating ceremonies. This completed, Prof. Isaac E. Taylor, President of the Faculty, announced the Rev. Dr. Ferris, who opened the exercises with prayer. Prof. W. McCready then delivered the introductory address, a brief extract of which we cut from the *Tribune:*

"Something more than twenty-five years ago, he was a student of medicine in this city, and attended lectures at the old college in Crosby street, the instruction of which was almost exclusively didactic. Chemistry and anatomy were appropriated by the late lamented Dr. Beck, whose loss was still deeply felt by the profession. As to morbid anatomy, during the whole term of his study he never saw a recent specimen. Clinical teaching there was none. The attendance, even at the City Hospital, had at length fallen off. Nevertheless, the old preceptors were great in their day, but the necessity for a more practical system of medical teaching gradually made itself felt, and clinics were instituted at the colleges, which were not without a certain value, though open to obvious and serious objections. In the first place the patients who attended were taken from a class of society, many of whom were abundantly able to pay, that class in which the young and struggling physician finds his first patrons. Besides, all grave and acute disease confining the patient to his house would necessarily be enhanced. Again, the students were rarely able to follow up the case and to watch the progress of the disease. Previous to 1848 the medical administration of Bellevue was confined to a Resident Physician, chosen by the Common Council, and party politics had a great deal to do with the nomination. Every change of Government was accompanied by a change of physicians, the question always being 'is he a sound Democrat, or Native, or Whig?' under whose administration occasional horrors occurred that would astound a community of this day. In 1848 the Medical Board received authority over the Superintendents. This Board had steadily and persistently attempted to render the institution available to students in chemical lectures, and labored to make it an honor to be connected with it, as well as to repay the public for sustaining it, by attracting students to the city. The name of Bellevue Hospital, instead of being a reproach, was known throughout the length and breadth of our land in connection with thorough medical instruction. The attention to the sick had been equally satisfactory; the average mortality many years ago was 20 per cent., when it was reduced to 14, and for a number of years past it had been only 10 per cent. The number of patients last year was 10,000. The question naturally came up, Why not add didactic to chemical instruction, two things that would naturally seem connected together? In Great Britain, and throughout the European Continent the two were united. Our enterprising neighbor, the City of Churches, the speaker said, had stolen a march upon New York by inaugurating a Medical College in connection with one of the hospitals, and set an example for the rest of the country. [Cheers.] The Medical Board of Bellevue now found itself at the head of the noblest hospital system established in America, including under their supervision cases of every disease mankind is heir to, and where Lascars, Chinamen, and the Indians of Chili, were found side by side with every nation of Europe and every State in the Union. [Applause.] How the question alluded to first took, was unknown, but certain it was, that when proposed, it was immediately received in the kindest and most candid manner possible by the Commissioners in charge of the Alms-house and public institutions, whose farseeing discrimination discovered in Bellevue College a future existence. [Applause.] The foundation of the building now occupied as Bellevue Hospital was laid in 1811, just on the verge of our last war with Great Britain, which did not hinder its walls from going up. So the present war had no power to prevent the establishment of additions to its usefulness. The student's great field of study, the Doctor said

emphatically, pointing to the hospital building, lies yonder; we are here to teach you the language in which the book of life is written, and help you with our comments. There lies the book itself—its pages torn and soiled, yet bearing the impress of the Creator. [Cheers.]"

The address of Prof. McCready was frequently interrupted by applause.

He was followed by Prof. Taylor in a brief but exceedingly appropriate welcome to the students present, closing with an impressive appeal to zeal and devotion to the profession they had chosen.

Hon. Simeon Draper was then introduced, and drew the attention of the citizens of New York to what these gentlemen of the medical faculty are nobly and skilfully doing for the poor of our beloved city. He was followed by Archbishop Hughes, who, in a vein of mingled earnestness and jocose illustration, kept the audience in excellent humor. Mankind, he said, were divided into two classes, the killers and the curers. His countryman, the Duke of Wellington, was an eminent instance of the former class, but he took good care to have about him the very best and ablest surgeons he could find—who were the curers, and thus he partially remedied the evils he found it necessary to create.

"Were the present a *post prandial* occasion, he should certainly offer a peculiar suggestion. As it was, he would beg leave to express his respect for a most eminent killer and a no less distinguished curer—Gen. Scott and Dr. Mott. This happy hit was greeted with rounds of applause."

Rev. Dr. Chapin was next introduced, and passed a most brilliant and glowing eulogy upon the medical profession, characterizing it as a practical union of benevolence or practical Christianity, and science. He was followed briefly by Dr. Mott, and by James T. Brady, Esq., when the exercises were closed by Rev. Dr. Ferris, who dismissed the audience with a fervent benediction upon the good work so wisely undertaken and so happily inaugurated.

"SCOPES."

There is now a prevailing rage for visual explorations, and innumerable contrivances with the prefix *speculum*, or the affix "*scope*," are in demand. We have the speculum uteri or matricis, speculum vaginæ, speculum ani, speculum oculi, speculum auris, speculum oris, as well as the various "*scopes*," as the ophthalmoscope, laryngoscope, auriscope, or otoscope, and stethoscope. All these useful instruments are having, or have had, a run. Much has been recently developed by means of the ophthalmoscope, and the laryngoscope has been found to have considerable practical application, and the success of these instruments has given an impulse to the ocular exploration of the interior of organs.

Dr. T. G. Thomas, in the *American Medical Monthly*, says that Dr. Pollak, writing from Paris, describes an instrument used by Desormeaux, of *Hôpital Cochin*, for illuminating the bladder. It is a catheter with illuminating apparatus at the end, which has a window. He pretends that he never fails to *see* a calculus, without feeling it. We do not fail to transplant here also a London invention by a celebrated "stomach man," to wit, an instrument for the examination of the interior of the great digestive organ in obstinate and obscure disease, to be ycleped the "gastroscope." It mainly consists of a tube which passes down into the stomach through the œsophagus, and is so delicately arranged, that by a series of reflecting surfaces the state of particular parts of the mucous membrane is shown in a mirror at the back of the mouth.

It is now fashionable to look *into* patients. This will do for a variation of the practice of some of our sensation obstetricians, (the *os-uteri-paths*,) who look *up* their patients. This class of *paths* say to almost every female who presents, instead of the obsolete "put out your tongue," "*let me see your uterus*." The requisites for this *scopy* seem to be a shining speculum uteri, with lantern and reflector, and a "tilting-chair" in the office of the *path*, who, like Mr. Micawber, is always looking for "something to turn up."

We would suggest to the *scopists* another "*scope*," which would enable them to look into their patients pockets, and, to be classic, would call it the *Marsupioscope*.

—o—

A New Jews' Hospital is being erected at Norwood, in the vicinity of London. Liberal donations by the wealthy class have been made for the purpose. The corner-stone was laid by Baron Rothschild.

EDITORIAL NOTES AND COMMENTS.

Prolapse of Funis.—A correspondent, in a private note, mentions a case of this kind which had lately occurred in his practice. The lady was thirty-eight years of age, and now confined with her seventh child. It was a vertex presentation, and rotation and partial expulsion had taken place before the doctor's arrival; animation was entirely suspended. The cord had been down fully one and a half hours, this event occurring immediately after the rupture of the membranes. By the postural treatment the cord was restored without the least trouble, the pelvis being very roomy.

Measles by Mail.—In the *Medical Times and Gazette* for September 28th, we find an instance mentioned, in which the infection of rubeola or measles was conveyed by mail. A young lady, who had previously had an attack of measles, received a letter from a friend who was in constant attendance upon another friend, who was ill of that disease. A few days after a rash made its appearance upon the young lady, which was pronounced by her physician to be the eruption of measles, after repeated opportunities of verifying his opinion. The constitutional symptoms were very slight, but sufficiently marked. There was no case of measles in the neighborhood, nor had the patient exposed herself to any source of contagion.

The case is certainly an anomalous one: 1st. In the re-occurrence of the disease in the same patient, which is rare. 2d. In not requiring the usual time of incubation. If the contagion of the disease were conveyed by the letter, we can hardly account for the apparent fact of its taking effect so much more rapidly than when conveyed in the ordinary way and in a first attack. Does it acquire virility in its passage by mail, or is it the law of contagion propagated in this manner that its incubation is shortened? These queries render the diagnosis of measles, in this case, to our mind, somewhat doubtful.

Chloroform in Slaughter-Houses.—This article is used among our transatlantic neighbors not only to annihilate the pain of surgical operations, but of late to quiet the struggles and pain of animals consigned to the slaughter. The application of a sponge saturated with chloroform to the nose of the animal, be it pig, ox, or sheep, renders it as "quiet as a lamb," in an exceedingly short space of time. In this unsuspecting condition the application of the knife will put an end to the life of the animal without its ordinary struggles. The humanity of the process, which thus deprives death among the lower animals, of the pain which it occasions, cannot be questioned; and we have no doubt that the chloroform might be successfully used in some of those operations, castration for example, to which they are subjected, but to render its administration entirely desirable in those animals slaughtered for food, it should be carefully ascertained whether the meat be not rendered deleterious by the means.

Early discharge of the Ovum after Menstruation.—A correspondent at Brooklyn, New York, in a note to the editors of the Reporter, gives the particulars of an interesting case of this description, which came under his own observation. Miss A——, seamstress, about twenty-one years of age; always enjoyed good health; menstruated at sixteen, and regularly every thirty-five days since, lasting usually about five days, and unaccompanied by any disturbance of the general system. Upon the fourth or fifth day after the cessation of the menstrual flow, the discharge of the ovum is invariably attended with a discharge similar in appearance to the menstrual blood, continuing from four to five hours. This occurrence has regularly taken place at the same time after each menstrual period, until the last return, when the ovum was discharged about twelve hours after, and occasioned great alarm.

The discharge of the ovum is not usual at so early a period, and this case affords a rare instance of exception to the general rule. Eight to twelve days is the ordinary limit. Nor is the discharge accompanied ordinarily with any disturbance of the general system, nor is it in any wise alarming, it being simply the process by which nature casts off an unimpregnated ovum, and renders conception impossible until the reappearance of the menses.

The readers of the Reporter will remember the urgent request in our last for vaccine matter for the army. The Surgeon-General of the State appeals to the profession for the supply needed. The importance of vaccination and re-vaccination to the well being and protection of the noble volunteers from this State cannot be doubted, and we trust the response to his request will be prompt and generous. Address Henry H. Smith, M.D., 1112 Walnut street, Philadelphia.

Treatment of Prisoners by the Confederates.—Dr. Le Boutillier, Surgeon of the Minnesota First, who was released on his parole by the Confederate authorities, relates his experience while a prisoner in their hands, and the treatment of the Federal prisoners. After the battle, he says:

"I walked towards a house which I thought looked like a hospital, and upon reaching it found I was not mistaken. I there met Drs. Powell and Ferguson, of the Second New York, and entered into conversation with them. I scarcely had been talking with them five minutes when a squadron of cavalry, numbering about fifty men, charged upon us, surrounded the yard and house, and although we exhibited our green sashes and informed them that we were surgeons and that the building was a hospital, they fired upon us—emptied every gun they had in their hands.

"They killed three of the wounded—two Northerners and a Georgian—who were lying on the ground in front of the house, under a locust tree. They also shot the brave Ferguson in the left leg, fracturing both bones."

After stopping at Manasses for ten days they were taken to Richmond to prepare hospitals for the wounded. On their arrival they were set to work clearing two large five story brick tobacco factories for that purpose. In a few days the wounded began to arrive, and both buildings were soon full.

"They had been thrown into cattle cars, without straw or hay for bedding—those with broken or amputated limbs must have suffered most terribly. The fractured limbs had not been placed in splints in the majority of cases, and the bones generally had worked their way through the wound and protruded through. The cases of amputation were still worse. The sutures had cut through the flesh, leaving the muscles and bones bare, and the majority of wounds were alive with maggots—almost every case of amputation resulted fatally.

The wounded at Richmond were not furnished with and blankets or clothing, and very little medicine—a few cots were furnished for the worst cases. There were at one time one hundred and twenty cases of fever in the hospital under my charge, and three-fourths of them had to lie on the bare floor.

The wounded were furnished with bread and fresh meat, and occasionally rice and a few vegetables. Only for the timely aid of kind friends whom we met in the city, the poor fellows would have suffered far worse."

They were all kept under the most vigilant surveillance, and nothing was permitted to be carried into the hospital without a special order from Gen. Winder, commander at Richmond. They were not permitted to put their heads out of the windows, and some of them came near paying the penalty of disobedience to orders by being shot.

"The officers, about eighty in number, were on a floor about sixty feet in length by twenty in breadth, and were not furnished with anything but the common food given to the other prisoners—a great many of them had nothing but the bare boards for a bed during my stay there.

Dr. Ferguson, mentioned above, communicates the following facts in relation to the treatment of Mr. Huson, who died at Richmond:

"This much I may say: Mr. Huson, when taken sick, was kindly cared for. He was removed on a litter from prison to the house of a widow lady, where he was well treated, provided with medical care, &c., and where he died. He had lost some flesh before he was taken sick. He was ill two weeks. The day before he died, he said he wished his wife knew how comfortably he was situated. Mr. Ely was to write to Mrs. Huson, but his letter may, of course, be long detained."

Correspondence.

NEW YORK CORRESPONDENCE.

Non exercitus, neque thesauri, præsidia regni sunt, verum amici.—*Sallust.*

Seldom has it been my lot to witness a demonstration of such a medico-public character as that participated in by hundreds of our prominent citizens during the formal inauguration of Bellevue Hospital, Wednesday, Oct. 16, 1861. "*Punctum Stans!*" A short time before 12 M., most of our practitioners, who could spare the time—and, in not a few instances, accompanied by their wives—gathered round the reception wharf of Bellevue Hospital, where the steamboat General Arthur awaited their decision to glide forth, the proud supporter of more therapeutics, in the human form, than probably since man became a victim to disease, has been the duty of any hired vehicle.

The students, ladies, and associates visited Blackwell's Island and the many institutions of the poor—the lunatic and the depraved, while a second boat-load was brought on, there not being room enough for all at first. Next Randall's Island was carefully reviewed, together with the little regiment of *infantry*, much after the character of "Oliver Twist." The floors of each apartment were clean enough for food, and systematic regulations of the several departments could not fail to win applause, and call forth commendations from both young and old. Most certainly have the "Commis-

sioners" been busy in the active pursuit of their assigned duties.

I understand that each professor of "Bellevue College has been taxed $5,000. No doubt this "National Fund" will unite them closely. Already forty students have entered their names. At half-past three the boat returned. No sooner were the doors opened than the spacious and comfortable lecture room was crowded to its utmost capacity. No standing room, in time, remained. Ere long Prof. Doremus' laboratory was thrown open, (which faces that just spoken of,) and a collocation of religion, theory and practice, reporters, and the elevated Doctors of this new College, met our gaze.

President Taylor then made a few pertinent remarks, with fluency and suggestive purport. Next Prof. McCready delivered the opening address, which abounded in good sense, sound practical facts, progressive views, truthful statistics, and interesting details. Simeon Draper—that aggravated agglomeration of superabundant gratuities—spoke to the point and with earnest brevity. Well might Mr. Draper feel proud of the effectual results of his honest labors!

Bishop Hughes was witty, sententious, and very happy in his kind allusion to a great "killer" General Scott, and a great "curer" Dr. Mott. Dr. Chapin, naturally eloquent, electrified the audience when speaking of the country! James T. Brady followed, and though last, proved equal to the great event. Through the energy of Dr. Sayre an excellent collation, with champagne, awaited those admitted to the penetralia, and certainly produced most pleasurable sensations on the nervous system of your friend GOURMET.

NEWS AND MISCELLANY.

Volunteer Medical Aid for the Army.—We recently noticed the fact that a number of physicians of this city had offered themselves for temporary service to the wounded of the army, should their services be, on an emergency, required. About fifty practitioners who are in active practice, and in good professional repute, have thus offered themselves, and the number might, if needed, be extensively increased. Their services have been officially accepted by General McClellan, and they are requested to hold themselves in readiness for departure in the first train after they shall have received a notification.

The New Clinic Room at the Philadelphia Hospital was inaugurated on Saturday last, by an address from Dr. Ludlow, one of the attending physicians, which we are glad to learn is to be published.

The New Hospital building attached to the Cooper-Shop Refreshment Saloon is finished and ready for occupancy. It has fourteen beds, and an experienced nurse, with several assistants, will be in constant attendance. Two physicians have volunteered to attend the patients, and furnish all the necessary medicines free of cost. The hospital of the Union Committee is also nearly ready for occupancy, at the foot of Washington street.

We understand that Dr. L. Turnbull, of this city, has been engaged for some time past upon a translation of the Practical Treatise on the Diseases of the Ear, from the French of Dr. E. H. Triquet, of Paris, and which will soon be published.

R. C. M. Woodward and C. M. Chandler are the surgeons connected with the 6th Vermont Regiment which lately passed through this place *en route* for the war. Six men of the regiment were left at the Military Hospital in this city. Four are sick with the measles, and two are lame.

A Government Hospital in this City.—It is currently reported, and on authority deemed reliable, that the Government has secured the Girard House in this city for an army hospital, and that the building will be at once fitted up for the purpose. It is eminently adapted for such use, the rooms being light, airy, and well ventilated. It is also said that St. Joseph's Hospital and the Washington building are mentioned in connection with the same use. We think the policy of the Government, if the above be the fact, is highly commendable, both on account of sending the sick and wounded away from the crowded hospitals of Washington, and also on account of the great advantage they will enjoy in this city for accommodations, for the attendance and care of nurses and friends, and for superior medical attendance.

Dr. S. H. Bradley, formerly of N. Y., but who has been in practice for some years past at Montgomery, Ala., and who was at Bull Run, as Surgeon of the 2d Alabama Regiment, has lately made his escape from the South. He attempted to escape at the battle of Bull Run, but was detected by the Confederates, handcuffed and ironed, and sent to Montgomery jail, where he was kept till Sept. 25th, when he was released. He then made his way to New Orleans, and thence, after a variety of unpleasant adventures, to Washington.

Dr. Oscar Heyfelder, Professor of Surgery at the Imperial Medical Academy of St. Petersburg, Russia, author of the latest work on exsection of bones, has authorized Prof. Louis Bauer, of Brooklyn, to tender his services to President Lincoln, for the United States Army during the war. We trust the valuable services of so eminent a surgeon will be accepted, especially as it adds confirmation to the already expressed sympathy of Russia in our behalf, and gives us assurance of more than moral support, on her part.

The Brigade Hospital located at the Episcopal Seminary at Washington under the care of Brigade Surgeon Bukeley, contains 360 patients. The deaths have been at the rate of only one a week, out of over four thousand men. Dr. Bukeley has succeeded in establishing a desirable system of diet for the sick, with the revenue arising from the surplus rations. Not being a regular general hospital, the sick are allowed, according to the regulations, only the soldiers' rations; but by commuting part, Dr. Bukeley has obtained many delicacies for the sick. The system could be advantageously copied by other hospitals, as well as in many of the companies of healthy men.

The following additional appointments of Brigade Surgeons are announced: Drs. Z. F. Azpell, S. S. Cox, J. Hames, G. Grant, C. B. Chapman, J. C. Kennon, Wm. H. Mussey, C. W. Jones, Geo. Burr, W. M. Chamberlain, Robert Rascoton, N. R. Mosely, S. L. Pancoast, F. H. Gross. Dr. Wm. A. Bradley, Jr., to be Assistant Surgeon.

Dr. John McNulty, formerly Surgeon of the New York Thirty-seventh, has been promoted to be Brigade Surgeon, and has been assigned to the Staff of Major-Gen. Dix.

The New Building for the Episcopal Hospital is making satisfactory progress. It is now under roof, and the edifice begins to present evidences of its ornate and substantial character. It is believed that a portion of the building, sufficient probably for the accommodation of about one hundred patients, will be opened and thus used by next summer. The hospital is located in a neighborhood remote from any similar institution, and where, from the frequency of traumatic cases by machinery, it is much needed.

The Military Hospital on Christian street near Ninth, has forty-three patients; one hundred and fifty can now be accommodated, and it is in contemplation to erect a wing on each side, which would increase its capacity to four hundred.

Death of Mr. Cusack.—This eminent surgeon, of Dublin, died on the 25th of last month. He was surgeon to Stevens' and Swift's Hospitals, Regius Professor of Surgery in Trinity College, and Surgeon in Ordinary to the Queen.

The number of patients in the hospitals at Washington for the week ending October 18, was as follows: E street, 77; Seminary, 130; Union, 130; Columbian, 215; General, 48; Eruptive, 104; Alexandria, 184. Total, 888.

Dr. C. H. Crane, since 1848 Assistant Surgeon of the United States Army, has recently been appointed Surgeon, with the rank of Major. He is assigned to Gen. Sherman's Division as Medical Director. Dr. Crane has seen a good deal of service on the frontiers.

Philadelphia School of Anatomy.—Dr. Agnew's dissecting room is in full operation, and he has recently begun a series of practical lectures on operative surgery.

The Duties af Brigade Surgeons—Important Order from General McClellan.—The following order has been issued in reference to an important branch in the service:—

General Order No. 20—*Head Quarters Army of the Potomac, Washington, October* 3*d*, 1861.—The following regulations respecting the duties of Brigade Surgeons are published for the government of all concerned:—

First—The Brigade Surgeon will frequently inspect the police, cooking, clothing, and cleanliness of the camps and men in their respective brigades, the position and condition of the sinks, the drainage of the camp grounds, the ventilation of the tents, &c., making written reports to the brigade commanders whenever, in their opinion, any errors in these respects require correction, and sending deplicates of these reports to the Medical Director of the army.

Second—They will see that the medicines, hospital stores, instruments, and dressings of the several regimental surgeons are kept constantly sufficient in quantity, in good order, and always ready for active service.

Third—They will collect from the several regimental surgeons, and transmit every Saturday morning to the Medical Director, a copy of their morning report made to the commanding officer of their regiment, and will accompany these with remarks showing the character of the principal diseases prevailing.

Fourth—They will promptly report to the Medical Director all changes in station or location of themselves or of any of the medical officers in their brigades, with the number, date, and authority of the order by which such changes were made.

Fifth—They will inspect carefully all men receiving certificates of disability for discharge, and, if they approve, they will countersign such certificates.

Sixth—The hospital attendants, to the number of ten men to a regiment, and the regimental bands, will be assembled under the supervision of the Brigade Surgeon, and will be drilled one hour each day, except Sunday, by the regimental medical officer, in setting up and dismantling the hand stretchers, litters, and ambulances, in handling men carefully, placing them upon the litters and ambulance beds, putting them into the ambulances, taking them out, &c., carrying men upon the hand stretchers, observing that the leading bearer steps off with the left foot, and the rear bearer with the right—in short, in everything that can render this service effective, and the most comfortable for the wounded who are to be transported.

Sixth—Brigade Surgeons will see that the orders of the Commanding General, in relation to the uses to which ambulances are to be applied, are strictly obeyed, and they will report promptly to the brigade commanders all infractions of these orders.

Seventh—Whenever a skirmish or affair of outposts occurs, in which any portion of their brigade is engaged, they will see that the ambulances and stretchers, properly manned with the drilled men, are in immediate readiness and attendance to bring off the wounded, and that the regimental medical officers are on their posts, with their instruments, dressings and hospital knapsacks in complete order, and ready for immediate use, so that no delay may occur in rendering the necessary surgical aid to the wounded.

Eighth—They will report in writing to the Medical Director, within twenty-four hours after any affair with the enemy, the name, rank, and regiment of each of the wounded, the nature and situation of the wound, and the surgical means adopted in the case.

Ninth—Brigade Surgeons will be held responsible that the hospital service in their brigades is kept constantly effective, and in readiness for any emergency. No remissness in this respect will be tolerated or overlooked.

By command of Major-General McClellan.

S. Williams, Asst. Adjt. Gen.

Note.—The Medical Director desires that exsection of the shoulder and elbow joints shall be resorted to, in preference to amputation, in all cases offering a reasonable hope of success, and that Pirigon's operation at the ankle should be preferred to Chopart's, or to amputation above the ankle, in cases that might admit of a choice.

Books Received.—The following books have been received:—Medical Jurisprudence, by Alfred Swaine Taylor, M. D., seventh edition; West, on Diseases of Women. From the publishers, Blanchard & Lea, of this city. The Diseases of Women and Children, by Gunning S. Bedford, M. D., sixth edition; from S. S. & W. Wood, New York city. Placenta Prævia, its History and Treatment, by Wm. Reed, M. D.; from J. B. Lippincott & Co., of this city. Physicians Hand-Book of Practice; from W. A. Townsend, New York.

Also, Monograph of Dr. J. J. Reese, of this city, on the Detection of Strychnine as a Poison and the Influence of Morphia in disguising the color test.

Also, Godey's Lady's Book, Atlantic Monthly and Harper's New Monthly Magazine, for November.

The Yellow Fever has been imported into the harbor of St. Nizaire, in France, by a vessel coming from New Orleans. Several deaths have taken place among the crew, and persons employed in unloading, including also a medical practitioner of the neighborhood who hastened to the assistance of his professional brethren.

The idiots in the Paris hospitals are becoming musicians.—Prizes were recently distributed among them for proficiency in this art.

We observe that the government have ordered an extra duty on *green tea*, regarding it as coming under the head of manufactured articles. This will be an effectual stopper upon its adulteration or its use.

Saint Eugénie Asylum.—The French Empress has founded a hospital at a watering place in the Pyrenees, and given it this title. It is intended for the benefit of the sick poor, who can thus have an opportunity of visiting the baths.

M. Porta, Professor of Operatic Surgery at Paris, has just presented to the University 1,200 pathological preparations, put up by himself. It is to form the nucleus of a museum to be called by his name.

A statue has just been erected to the memory of Peter Condenburg, the first Pharmacographer, at Antwerp. He is called the father of Belgian pharmacy, and wrote a full century before the French pharmaciens.

An Atlas of Histology, composed of photographs taken from preparations of the anatomy of the peripheric nervous system by M. Büdinger, Demonstrator of the University of Erlangen, has just made its appearance at Leipsig. The plates are said to be perfectly wonderful as to exactitude and finish.

We see it stated that some arsenical preparation is used in the manufacture of the *paper collars*, so extensively worn by gentlemen. Cases have been known where persons have been injured by their use.

Guizot says the finest sentence to be found in any language may be read in almost every street in London: "*Supported by voluntary contributions.*"

The question of burning instead of burying the dead is now being discussed at Paris in a manner becoming so *grave* a subject. As it is a question of *grave* or no *grave*, the *grave* manner of discussing the question is, certainly, quite commendable.

The friends, and they are many, of the late Lord Herbert, in Wiltshire, England, extend a warm welcome to the project of erecting there a monument to his memory. It is proposed also to enlarge and permanently endow a marine hospital at Charmouth, to be named the Herbert Marine Hospital, in honor of his efforts to establish it during his life.

Teeth of the Gorilla.—At a recent meeting of the British Association for the Advancement of Science, Prof. Owen made some remarks on the dentition of the Gorilla. The deciduous or milk dentition in the young gorilla, is something similar to that of the human child, but with some differences which he described. The dentition of the young animal corresponds best with that exemplified in the human child between the eighth and tenth years. The difference, however, is shown in the complete placing of the true molar, whilst the premolar series is incomplete.

MARRIED.

Graves—Jones.—On Wednesday morning, Oct. 23, at the residence of the bride's father, by Rev. E. B. Van Auken, of Charlotte, Dr. C. F. Graves, of Brooklyn, N. Y., to Annie, daughter of A. H. Jones, Esq., of Rochester, N. Y.

Draper—Kinnicutt.—In Worcester, Mass., on Tuesday, Oct. 15, by Rev. Dr. Hill, Dr. Wm. H. Draper, of this city, to Elizabeth Waldo, daughter of F. H. Kinnicutt, Esq., of the former place.

DEATHS.

Miller.—October 18th, in Lancaster, Pa., Dr. John Miller, in the 69th year of his age.

Answers to Correspondents.

Postage Stamps.—Subscribers will please *not* send us the old style of stamps, as they are worthless to us, not being received for postage at the Office in this city. They will also please send us *only one* and *three* cent stamps. tf

Dr. B. A. M., N. Y.—The binder will find no difficulty with the index. He will find the work correctly paged. The index is to be taken out, and may be placed in front, or at the close of the volume, as you may desire.

Dr. J. W. B., Ct.—The best work on the *modus operandi* of medicines is that of Headland.

☞ During the past week, we received a letter post-marked Troy, N. Y., which contained four dollars in money. We suppose it to be from one of our subscribers in Troy, but from which one we are unable to decide, as no name is signed to the letter enclosed.

Dr. P. R. W., Pa.—The fluid extract or the saturated tincture of veratrum viride should be preferred. Either is reliable. Bullock & Crenshaw of this city prepare them. Tilden's fluid extract we have found reliable. As a rule, the dose of either for an adult, is five drops, gradually increased. For Norwood's formula for making the saturated tincture, see Answers to Correspondents on page 84 of last volume, (April 20, 1861.)

Dr. J. H. T., Philadelphia.—The list of successful candidates before the State Medical Board is not published, except as appointments are made by the Governor. These we shall publish as they are made.

Dr. S. R, Pa.—We cannot inform you when the next State Medical Board meets. Make application by letter to the Governor of the State, and your communication will be filed, and you will be notified of the time to appear for examination.

Communications Received

Connecticut.—Dr. Edward L. Griggs, with encl. *Delaware*—Dr C. W. Jones, with encl.; H. F. Mills, with encl. *District of Columbia.*—Dr. G. M. Dove, with encl.; H. S. Schell, with encl. *Illinois.*—Dr. R. F Hayes, (sent by mail); Dr J. C. Whitehill, with encl. *Iowa.*—Dr. M. Marbourg. (see October 5.) *Maryland.*—Dr. J. K. Berkabile, Dr. D. M. Skinner, with encl.; Dr. W. J. Evans. *Massachusetts.*—Dr. E. Barton, with encl.; Dr. L. P. Hubbard, (all right); Dr. Giles Pease, (all right); Dr. Charles Cullis, (all right); Dr. F. R. C. Kitteredge, with encl. *Michiyan.*—Dr. C. R. Case, with encl. *New Jersey.*—Dr. N. S. King, with encl.; Dr. Chabert, Dr. C. Shepherd, Dr. W. L. Martin, with encl.; Wm. Johnson, with encl.; S. Sproul, with encl.; D. B. Trimble, with encl. *New York.*—Dr. E. C. Green, with encl.; Dr. S. W. Francis, Dr. W. E. Whitehead, Dr. L. Wilbur, Dr. L. Bauer; Drs. E. R. Squibb, E. Stewart, M. E. Winchell, F. Myers, J. T. Conway, A. C. Cornell, John Buck, J. Leathe, J. Boyle, E. D. Judson, H. S. Firth, Geo. Newby, Wm. F. Holcomb, Joel Foster, J. M. Carnochan, A. Rowe, C. A. Seeley, Wm. A. Weir, A. Miles, H. E. Firth, H. Fearn, A. Otterson, S. M. Giddings, J. J. Basora, W. W. Hadley, Wm. Rockwell, M. C. O'Tool, W. H. Maxwell, W. F. G. Thiers, W. B Roome, B. Duggan, D. G. Farwell, W. N. Blakeman, J. M. Andrus, B. J. Raphael, E. Naeggeroth, Horace Green, B. C. Lessler, W. E. Vermilye, E. M. Potter, E. J. French, Truman Nichols, J. E. Stillwell, John Shrada, C. Y. Lozier, L. V. Boyd, C. A. Budd, F. W. Hunt, J. B. Richmond, J. P. Angle, each with encl.; Dr. H. M. Truman, (all right); Dr. P. D. Peltier, (sent); Dr. J. G. Meacham, with encl.; Dr. H. H. Nye, (right now.) *Ohio.*—Dr. T. N. Lewis, with encl.; Dr. J. Williamson, Dr. W. J. Kelley. *Pennsylvania.*—Dr. J. R. Bucher, with encl.; A Dimmick, with encl.; John Lawman, with encl ; Dr. A. G. Cross; Dr. J. L. Duncan, with encl.; T. H. Wilson, with encl.; Dr. W. L. Trout; Dr. John Foote, with encl.; Wm. Anderson, with encl.; G. J. Scholl, with encl.; J. J. Roebuck, with encl. *Rhode Island.*—Dr. D. W. Handy. *Vermont.*—Dr. T. D. Ross, with encl.; O. T. Fasset, with encl.

Office Payments.—Drs Flynn, Funk, Rohrer, Crowley, Dickson, Wittig, Biper, Jackson, McClintock, Corse, Cox, Thomas, Waters, Kammerly, Leon.

VITAL STATISTICS.

Of Philadelphia, for the week ending Oct. 19, 1861:

Deaths—Males, 114; females, 119; boys, 61; girls, 80—Total, 233. Adults, 92; children, 141. Under two years of age, 88. Natives, 178; Foreign, 39. People of color, 11.

Among the causes of death we notice—Apoplexy, 0; convulsions, 9; croup, 5; cholera infantum, 4; cholera morbus, 0; consumption, 31; diphtheria, 8; diarrhœa and dysentery, 3; dropsy of head, 7; debility, 17; scarlet fever, 13; typhus and typhoid fever, 6; inflammation of brain, 8; of bowels, 4; of lungs, 12; bronchitis, 2; congestion of brain, 6; of lungs, 3; erysipelas, 0; whooping cough, 0; marasmus, 14; small pox, 10.

For week ending October 19, 1860.....202
" " " 19, 1861.....233

Of Boston, for the week ending Oct. 12, 1861:

Deaths—Males 27; females, 41. Total, 68. Under five years of age, 34. Natives, 46; Foreign, 22.

Among the causes of death we notice—Phthisis, 15; cholera infantum, 8; croup, 2; scarlet fever, 1; pneumonia, 6; variola, 0; dysentery and diarrhœa, 2; typhus and typhoid fever, 2; diphtheria, 0.

Of Brooklyn, for the last week:

Deaths—Males, 72; females, 47; boys, 45; girls, 29—Total, 119. Adults, 45; children, 74; Natives, 85; Colored people, 1. Among the causes of death we notice: consumption, 13; convulsions infantile, 10; marasmus, 6; typhoid fever, 4; smallpox, 4; dysentery, 2; scarlet fever, 3.

Medical Directory.

Under this head we propose to give such information in regard to the Medical Colleges, Hospitals, and Societies of the City as we may be able.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr. J. F. Meigs.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Medical Clinic on Wednesday's and Saturday's, at 12 M. by Prof. Pepper; at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery.—Clinical Lectures Saturday's, at 3 P. M., by one of the Professors.

Wills Hospital for the Eye and Limb.—Clinics, Monday and Friday at 12 M., by T. G. Morton, M.D.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 263. } PHILADELPHIA, NOVEMBER 2, 1861. { NEW SERIES, VOL. VII. NO. 5.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Water: its History, Characteristics, Hygienic, and Therapeutic Uses.

By Samuel W. Francis, A.M., M.D.,
Of New York.

(*Continued from page* 80.)

MINERAL WATERS.

The curative properties of water are so universally comprehended and appreciated, that, for present purposes, the mere enumeration of some of the most effectual springs will serve to indicate their great value and lasting benefit. This protoxide of hydrogen, found in every clime; the supporter of nature's plans, the best wine for healthful livers, is of different density in various considerations; its purity greatly depending upon its locality. The most condensed opinion of these many qualities, to be found in water, is unfolded to the public by a lucid thinker, rational expounder and concise reporter.*

"Aqua levissima pluvialis est; denide fontana; tum ex flumine; tum ex puteo; past hæc ex nive, aut glacie; gravior his ex lacu; gravissima ex palude." How rarely do the modern learned seek to gain the essence of experience, and extract from multitudes of facts the pithy truth, whereby to propogate a principle and expose a fallacy. Shrewed minds think short. Keen intellects exhaust a subject, lop off the vast superfluous, and arrange with beautiful simplicity the outlines of a subtle aphorism!

To mention alone the countless number of mineral waters; vast tonic properties of the chalybeate springs; beneficial effects of the efficient theopegæ; fashionably, fascinating, cooling spas; acidulated drinks that rarely fail, and as many more equally important as constitutional remedies, successful in their results, and permanent in their consequences: to record the different methods of administering, by means of water, iron, potash, sulphur, bromine, alumina, phosphoric acid, fluate of lime, oxide of manganese, and, in fact, nearly all the gems of nature's soul, together with the opinions of the well-versed and the certificates of the cured, would fill many a quarto volume, and leave little space for sage reflections as to ways and means, cause and effect, loss and gain, in reference to hygienic laws and hospital statistics.

Many obstinate cases of rheumatism, that have defied treatment and outlasted good advice, have not unfrequently succumbed to baths and the judicious imbibition of medicated springs. And even after too free an indulgence in the good things of this world, the gourmand soothed himself in days now silent:

> "Cum stomachus, domini fervet potuque ciboque
> Frigidior Geticis petitur decocta pruinis."*

The pleasant tales of St. Winefred's Well and Holywell, the wise suggestions of the observing Dr. Barnard, and the strong belief of Cælius Aurelianus in this grand purifier of the person, cannot be perused without the pleasantest emotions and a glow of satisfaction at the earnestness of those who lived in antiquated times and under superstitious doctrines. The Willowbridge waters, the καλαχυσις of Hippocrates and the much-praised influence of St. Mingo's Well indicate the variety of interest, the extended fondness for a cleansing agent. Readily may the devotion of the Mahometans, in anointing their heads three several times with water, be appreciated as a symbol of purity. According to one authority,† previous to

* Celsus.

* Juvenal, Satyr. 5.
† Persius.

all devotional exercises, immersion, or ablution was practiced in the ages now gone by:

"Hanc sancte ut poscas Tyburino in gurgite Mergis
Mane caput bis terque et noctem flumine purgas,"

It were tedious in the extreme to go minutely into the early practices of the ancients. The most elaborately cultivated minds recommend a judicious use of water, medicated or otherwise, as the case may demand or the treatment indicate.

"Water drinkers are, in general, longer livers, are less subject to the decay of the faculties, have better teeth and more regular appetites than those who indulge in a more stimulating diluent for their common drinks."*

Another writer† whose knowledge of the animal economy was based on sound deductions, has observed that: "Pure water is the fluid designed by nature for the nourishment of all bodies, whether animal or vegetable."

Again, the following sentence from the mind of a mountain‡ of sound philosophy is of a character that embraces the entire field of potations: "All drinks which supply the necessary liquid, (that is for the support of the functions of the animal economy,) do it only by the quantity of elementary WATER they severally contain." Though these few extracts would seem abundant evidences of the priceless value of the crystal stream, I cite the thoughts of a deep cogitator:

"O madness! to think use of strongest wines
And strongest drink, our chief support of health,
When God, with these *forbidden*, made choice to rear
His mighty champion, strong above compare,
Whose drink was only from the limpid brook."

Nature is not faulty in her attendance upon the sick and debilitated who waste away for want of nourishment, and lapse into a feeble listlessness, the sad result of a deficient principle. Even as the instinct of the cautious quadruped prompts him to seek some relief in the soothing herbage of the sunny fields, so man, by following the indications of necessity, and drinking freely of what may be found in springs, succeeds in cleansing his affected skin of its impurities, and by a judicious use of its most healing waters, gaining strength of import to his inner self.

In Arkansas, of late years, a valuable boiling spring has been discovered, the properties of which are not yet fully determined; but it is thought by some‖ that ere long its capabilities will secure much to the physically distressed, and in time prove a source of specific cure in disease and a benefit to mankind in general.

The mineral waters of Avon (Livingston county, N. Y.,) have proved effectual in the alleviation of chronic disorders and annoying eruptions. "To know the composition of a mineral water is to precede, in some degree our experience," was the remark of one of parts.*

Hence we find that, soon after the records of a few beneficial results are obtained, a careful analysis is the consequence; physicians become well aware of what they prescribe, and the expression "la science des eaux minerales est a refaire,"† which was made many years ago, has proved of use by calling some attention to the great deficiency of data. While Dr. McLean strongly advocated the Saratoga waters in cases where the digestive apparatus had been enfeebled by excess of living, and Dr. Parry spoke earnestly of the remedial agency of the Bath waters, England; Drs. Salisbury and Francis maintained the inestimable value of the Avon Springs, which are annually becoming better known and more gratefully appreciated. Though sulphur be a laxative and diaphoretic and most beneficial in its action on the alimentary canal "with hydrogen, oxygen, and the alkalies, it forms a compound which is soluble in water," etc.‡ Though sulphuretted hydrogen was discovered by Schœle in 1727, its advantages are daily becoming more important; and, as a detective test, it is alone an indispensable ally. When such men as Bordeu, Home, and Mascagni recommend the judicious use of hydrosulphurous waters in cases of diseases of the urinary passages, there exists sufficient evidence that they possess certain virtues of no ordinary character.

In Europe nearly seven-tenths of the remedies prescribed by attending physicians may be said to be through the direct assistance of medicinal waters. Among those more generally popular with nomadic sojourners are Wiesbaden, Nassau—introduced in 1823, by the practical Kastner; the Vichy, France—extolled by Berthier in 1822; Leamington, England—described by Thomson in 1830—now the fashionable resort of decrepid plenitude; and Pyrmont, Germany—the popular prescription of the versatile Struve. There are about fifty mineral springs in Europe, which are, in verity, the comforts of old age—the tonics for anæmic fe-

* Dr. Saunders.
† Dr. Leake.
‡ Cullen.
§ Milton.
‖ Prof. Van Buren.

* Bergman.
† Alibert.
‡ Alibut Pricis Historique sur les eaux minerales.

males and the purgatives for lazy loungers. They become the focus of those persons who enjoy a delicate quiescence and the privilege of convalescence. While they benefit, each month, emaciated hundreds, they remove from the diathesis of thousands the exciting causes and morbific agencies.* So universal is the prejudice in favor of this liquid medicine, that scarce a family in high life, anywhere throughout well-educated kingdoms, but on certain shelves in their wine cellars, in suggestive rows possesses bottles of imprisoned health and chained humanity.

The Bain hydrofere, an ingenious and hygienic invention, now used in the Hospital at St. Louis, France, the production of M. Mathieu (de la Drome) which possesses the power of forcing the "*dust* or dew of water," through a small aperture in a box, has received the highest encomiums, and is eminently calculated to prove of importance to the medical profession. When it is known that water can be forced through the "pores of cast-iron under the pressure of seven thousand pounds to the square inch," a suggestion might be derived from this with reference to making it exude through the far less compact woody fibre that is used.

The two new metals, Cœsium and Rubidium,† whose future usefulness cannot be estimated, owe their origin to the "mother-waters of different saline solutions." In order to obtain but sixteen grammes of cœsium, it is necessary to "use the solid residue left by twenty tons of the mineral water of Kreuznach." This fact is of lasting utility in the analysis of waters. For in them is concealed latent wealth.

The elaborate remarks of Dr. Hanbury Smith, concerning mineral waters and their uses,‡ render it needless, as it would be impossible for me to enter into the subject with any degree of self-possession or the slightest prospect of ultimate success. One who has devoted years exclusively to the consideration of mineral waters alone; who, by immediate and personal investigations of the most approved springs; whose "spa" has become a feature even in busy, bustling, proud New York; and whose wide experience amply fits him for the task of clearly and as critically writing out the soundest thoughts, is a sufficient and practically good authority for the modern practice of a conscientious school.

O munera nondum intellecta deum ? §

"Thou chiefest good,
Bestowed by Heaven, but seldom understood."

*See the table of Dr. Pereira for a concise description and analysis of the principal waters.

†Discovered by Messrs. Kirchoff & Bunsen.

‡Now publishing in the New York American Medical Times.

§ Lucan.

To be Continued.

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

By a Hospital Surgeon of Philadelphia.

(*Continued from page* 30.)

gun-shot wounds of the hip joint.

Military surgeons all agree in the almost certain fatality of gun-shot wounds of the hip-joint. In such severe injuries, three courses are open to the surgeon—First, to leave the case to nature; secondly, to amputate at the hip-joint; thirdly, to resect the joint. When left to nature, the patient dies in a few weeks or months, worn out with pain and suffering; submitted to amputation at the hip-joint, he rarely survives. The operation by which he has the best chance for his life is resection, which was first performed for gun-shot injury by Oppenheim, and more recently, under Stromeyer's direction, by Dr. Schwartz, in May, 1849.*

The whole number of cases of resection of the hip-joint which has been performed (up to 1860) is 71, the first operator being Anthony White,† in 1815 or 1818, and the results being 33 deaths, 33 cures, and 5 unknown. Dr. John Rhea Barton was the first American surgeon who performed partial resection with success, in 1827; about four years after, Dr. J. K. Rodgers, of New York, performed the same operation with equally good results, (1840.) Subsequently, in 1844, Mr. Ferguson excised the head of the bone for caries, successfully.

gun-shot wounds of the knee-joint.

These wounds are considered very dangerous, owing to the laceration of the capsule, which has led to the practice of amputation. The following are the results of resection of the knee-joint, which has been performed in 183 cases, the first operator being Filkin, of Northwich, in 1762, the results being 54 deaths, 125 cures, and

*This operation consisted in removing the lower fragment with the saw, and in ex-articulating the upper one—it was neither difficult of execution, nor attended by hemorrhage, yet, after some days, the patient died of pyemia, and, on autopsy, it was found that a part of the ischium had been shattered by the bullet. Dr. Stromeyer's conclusion is, that he should, in any case, as Oppenheim, give the preference to resection, and that after the occurrence of suppuration, because then the operation is much easier, and because after some continuance of the formation of matter, it can better be expected that the patient will not sink under pyemia.

†This bold and hazardous operation was first recommended by W. Charles White, of Manchester, in 1769.

4 unknown; partial resection of the knee-joint in 36 cases, the results being 16 deaths, and 20 cures. Stromeyer says of gun-shot injuries of this joint—I have not undertaken resection of the knee-joint because it affords little hope, even under favorable circumstances, and because, in the majority of cases, it cannot certainly be known how much of the bone should be cut off. Three cases are all that have been reported by military surgeons: one in the Schleswig-Holstein war, and two in the Crimea, two fatal, one recovery.

We are glad to see that the Medical Director of the United States army desires that exsection of the shoulder and elbow-joints shall be resorted to in preference to amputation, in all cases offering a reasonable hope of success, and that Pirogoff's operation at the ankle should be preferred to Chopart's, through the middle of the ankle.

GUN-SHOT INJURIES OF THE FOOT.

Dr. Stromeyer considers the most dangerous are those caused by fragments of bombs; the whole number which he has seen proved fatal, either by mortification and rapid collapse, or by tetanus. Injuries of the foot by musket bullets are not so dangerous, and heal well under favorable circumstances. The number of cases of total resection of the foot-joint, 22, amongst which are 3 deaths and 19 cures; partial resection of the same in 77 cases, 8 deaths and 69 cures.

RESECTION OF THE ASTRAGALUS.

There has been 67 cases of resection of the astragalus, 9 deaths and 58 cures. Fab. Hildanus being the first operator, in 1670.

GUN-SHOT INJURIES OF THE CALCANEUM.

The calcaneum has been resected in 84 cases, with only 1 death and 83 cures, the first operator being by Fornisus, in 1669, etc. (Heyfelder.)

Grazing shots, with exposure and injury of the *calcaneum*, heal successfully under simple treatment; so, also, of the tarsus.

Of the many gun-shot injuries of the *metatarsus*, which Dr. Stromeyer has seen, one only proved fatal.

As regards injuries of the *Toes*, the same treatment holds good for them as for injuries of the fingers; he considers amputation as unnecessary, as recovery readily occurs without its employment. As, however, much pain is occasionally experienced, opium must be administered, and poultices should be employed in good time. It will thus be seen that he differs from the great English authority, Guthrie, who asserts that amputation generally follows the use of the poultice. Without going as far as Guthrie in the condemnation of the poultice, we have seen, both in hospital and private practice, injury from the long-continued application of them; they require care in their management, and should be omitted as soon as the surgeon considers proper, and not depending on the feelings of the patient.

AMPUTATION.

Derived from the Latin Amputo, to cut off.—We divide the operation into circular, flap, and oval. Next as to time of operating, called primary, if performed as soon as the patient become fit for it, after the reception of any injury. Wait always until reaction comes on. If the limb be mangled so as to be useless, give him stimulants, tranquilize his mind, let his skin become warm, then operate. On the field, hospital, and in private practice, this is the best and most successful period. Secondary amputation is that performed after the suppurative process has set in, and life is endangered from sloughing or the suppuration; this is more fatal than primary. The operation of continuity are those performed through the body of a bone; those of contiguity are performed through a joint, while those of necessity are such from the magnitude of the injury. Those of choice, when the limb has become partially or entirely useless. Never amputate if the limb is the slightest degree useful, or to gratify a patient's whim. The circumstances which are favorable for the operation are youth; habit somewhat reduced, but not too weak, cheerful temperament, good general health, simple wound, disease or accident, at a distance from the trunk and the upper extremities. Though a most simple operation, statistics show it to be a most hazardous, and therefore demanding the highest surgical skill as to its propriety and the proper time. Its mortality is greater than that for the operation of stone, being one-third or one-quarter, while stone is only one-eighth. Never operate unless compelled by necessity to do so, until you have prepared your patient, if he is debilitated and have hectic fever; stimulate, give him good nutritious diet and opiates; keep him in a dark room, and always use ether, or a mixture of ether and chloroform, as patients in such a condition can bear but little pain. If he be vigorous and reaction is considerable,

bleed. The following are the most important points of the operation. The patient is placed comfortably recumbent on a board or table of convenient height for the operation. The surgeon places himself on the left of his patient, so that he can use his right hand. The sound limb is held steady, and out of the way by an assistant. Another trustworthy assistant is ready to control the hemorrhage, by the pressure of his own fingers, or by the tourniquet, (but pressure should not be applied until the knife is just about to cut, so as to avoid venous congestion. Have conveniently arranged near you: ether, chloroform, tourniquet, bandages, lint, ligatures, silk and silver sutures, knives, saw, cutting-pliers, artery forceps, sponges, oil, brandy, wine, and water.

As the circular amputation was the first one used in surgery, we shall describe it first. It was introduced by Celsus, and modified by Dessault. Some are great sticklers for this operation, but I prefer the flap from the fact that it takes less time, three-quarters of a minute are enough, while five or six is required for the circular.

The circular amputation is performed thus, supposing the thigh to be the part concerned. An assistant, grasping the limb with both his hands, draws up the skin as far as possible. The surgeon holding the knife lightly, and with his arm at first placed under the thigh, divides the skin and cellular tissue in one continous sweep, and turns it up like a coat cuff. The muscles are then divided in two successive layers, each layer (being held upwards by a retractor, a portion of linen or leather slit at one end,) in such a manner that their contraction will form an inverted cone, and the vessels tied. Flaps are brought together, so as to form a line from before backwards, if the patient lie upon his back, or laterally, if he lie upon his side, to let the pus and fluids escape from the wound. It is less difficult to secure the vessels in the circular operation. It is best to be applied to those limbs containing but one bone, and not much muscular tissue.

The flap operation was first introduced in England, and afterwards modified in France. It consists in making a single or double flap, this flap having the shape of a cone, the apex being at the bottom of the wound when the bone is sawn off. It is generally performed with a long knife, called a catlin. After applying compression to the main vessel, the muscular tissue is seized with the hand, the knife plunged to the bone, passing over it, and carried out at the opposite side, sliding it down with a sawing motion sufficiently far to make a proper flap, then withdrawn, and passed out on the opposite side. If a single flap be made, that must be sufficient to cover the whole wounded surface. The third or oval operation was introduced by Langenbeck; the wound has an oval shape; best applied at the shoulder, and commissure of fingers and toes. For the operation at the shoulder, the operation of Baron Larrey is preferred.

The dressings, after the amputation, should be of the most simple kind. Sutures of silver wire or silk, strapping with adhesive plaster, lint or linen dipped in cold water, and careful bandage. Some most serious accidents, at times, occur during and after the operation, as for instance, hemorrhage, intense pain from ligature of nerve, etc., and even convulsions. Since the introduction of ether and chloroform, the three latter have been almost entirely overcome. Your patient must, therefore, be carefully watched. Arrest hemorrhage by the ligature and astringents, as before described. *Inflammation of the stump*, on its first appearance, use active antiphlogistic means to arrest it. *Conical stump;* this is caused by the surgeon not saving sufficient flap; this can only be cured by a second operation; cicatrix is sometimes very tender, and bleed on applying an artificial limb, or small tumors form on the end of the stump; apply astringents and tincture of iodine, or even remove the tumors. If abscesses and sinuses of the stump occur, let out the pus, placing the opening in the most dependent position. Necrosis and caries of the stump were common under the old mode of heavy top dressing, since the employment of light and cold water not so much trouble arises from this source. Cystitis sometimes occurs, known by all the signs of irritable bladder, at first increased desire to urinate, etc.; treat antiphlogistically at first, followed by opiates; phlebitis, followed by metastatic or pyemic abscess in the brain, lungs, or liver, treat by mercury and opium.

AMPUTATION IN GUN-SHOT WOUNDS.

Period for Primary Amputation.—The great majority of intelligent and well read surgeons adhere to the principle which was introduced into practice by the English and French military surgeons during the wars of Napoleon, by

amputating, as soon as possible, after the wounded man has recovered from the first shock. The great importance of this recovery I have dwelt upon before, wine or brandy being administered before the use of the ether or the chloroform.

The three Schleswig-Holstein campaigns, and the results of the Crimean war, afford new proofs of the correctness of these principles. Amputations within the first twenty-four hours give the best chances for the preservation of life. On the second day the prognosis is somewhat more unfavorable, if the wounded have been conveyed to a distance, and the limbs are infiltrated; on the third and fourth days the prognosis is worse, but improves gradually from the sixth day.

Drs. Tripler, Gross, and Hamilton, in their works on Military Surgery, when treating of amputation, are agreed in advising the primary operation. Tripler recommends the adoption of the flap operation in the arm and thigh, but prefers the circular for the forearm and leg, where time is of great importance. Hamilton advises the flap operation. Dr. Scrive, Surgeon-General of the French army in the Crimea, makes but one exception to the rule of primitive amputation, and that is in the operation at the hip-joint.

Period for Secondary Amputation.—According to Hennen and Stromeyer, this operation should only be performed after the patient has been removed into a pure atmosphere, and a free supply of it, and then select the most favorable period for its performance.

2. This operation should be performed in cases of gangrene, where it is not likely that a stump suitable for healing will be formed.

3. In cases of arterial hemorrhage, complicated with gun-shot fracture, where the hemorrhage cannot be arrested by the ligature at a distance from the wound.

4. In cases of profuse suppuration.

5. For deformity or uselessness of a limb.

6. In all cases in which the diagnosis has been established too late to admit of primary amputation.

The following are the Indications for Amputation or Exarticulation on the field of battle.—The precision and rich original experience, which are shown by Dr. Stromeyer, on this important subject, induces me to lay the following extract before my readers.

General Indications.—1. When a large limb has been carried away by any projectile, and it is desirable to replace the contused and lacerated wound by a clean one; if the bone projects, this must also be sawed off. 2. Fingers and toes scarcely ever require amputation; of seventy-three gun-shot fractures of the hand and fingers, seven only were amputated. 3. When the lesion of a limb is such to preclude the possibility of its further existence, dependent upon nerves and blood vessels; or of its usefulness, dependent upon bones and muscles. 4. When a grazing shot of heavy calibre has left the skin uninjured, but has destroyed the bony and soft parts—Dr. B. Beck,* a distinguished surgeon of the Austrian army, performed amputation in such a case.

Special Indications.—I. Upper extremities. The indications differ from those presented in injury of the lower extremities, because, according to the statistics of Dr. Esmarch, all wounds of the upper limbs heal more readily than wounds of the lower, and wounds of the right arm with more readiness than those of the left. Amputation of the upper extremities is indicated only when vessels and nerves are injured at the same time, or when fracture exists along with rupture of the great blood vessels, or after considerable loss of substance of the soft parts.

The special indications are:—1. When the arm has been carried away by a large projectile, or has been lacerated and broken to such an extent as to preclude the possibility of its preservation. In the diagnosis of these cases great care is required to ascertain whether the organs of the chest or abdomen have sustained injuries which necessarily must be followed by fatal results. 2. When the brachial plexus has been divided by a shot in the upper arm, so as to deprive the whole hand of mobility and sensibility. Under these circumstances the brachial artery must have been torn, and the radial pulse have ceased. 3. When the humerus is fractured and the brachial artery is torn. Even if there is no hemorrhage at the time, the cessation of the radial pulse is sufficient proof of the division of the artery. 4. When the elbow joint is shattered, and the brachial artery divided. 5. When the wrist-joint or wrist has been perforated by a ball in one of its larger diameters.

*It is with pleasure that we record the following order of an Austrian general, addressed to his troops. "I see everywhere military officers and surgeons equally exposed to the fire, and, therefore, the surgeons shall enjoy advantages and distinctions in every respect equal to those officers." He kept his promise, as Dr. Beck returned with the well-deserved order of merit, I sincerely trust our government will follow so good an example.

A shot, piercing the wrist in the direction from the dorsal to the palmar surface, without injuring either radial or ulnar arteries does not involve the necessity of amputation. No lesion of bones of the upper extremities, by either rifle or cartridge-ball is, in itself, an indication for amputation. Wounds of the brachial artery alone, do not require amputation. Rupture of the median radial, or ulnar nerves alone, or in combination with gun-shot fracture, does not involve the necessity of amputation.

II. *Lower Extremities.*—1. When a part of the leg has been carried away by a heavy shot, or has sustained an irreparable loss of soft parts, or has suffered a subcutaneous comminuted fracture, with crushing of the soft parts. 2. When the crural or popliteal artery and vein are ruptured, and the circulation in the lower part of the limb has ceased, even if there is no hemorrhage from the wound for the moment. 3. When the femur is shattered and its fragments have been carried in the direction of the large blood-vessels. 4. When the femur is shattered to a great extent, upwards and downwards, as is frequently the effect of a grape shot. 5. When the femur is broken, and the sciatic nerve ruptured. Division of the sciatic nerve alone does not indicate amputation. Dr. Stromeyer saw the injury three times followed by a favorable result. In one case trismus supervened. In the favorable cases paralysis continued in the parts supplied by the nerve, but the limb was still more useful than a wooden leg. 6. When the knee-joint has been perforated by a ball, and its articulating ends are shattered to such an extent as to give rise to immediate inflammatory swelling, should the patient require to be removed. Even in those cases where, after perforation of the synovial membrane, the lesion of the bone consists only of a simple impression or contusion, amputation is, according to universal experience, the only means of saving the patient's life. But, in this case, the operation may be delayed till the patient has arrived in a hospital, conveyance not having the same injurious influence upon the state of the wound as it has when extensive shattering is present. 7. When the tibia has been extensively shattered directly below the knee-joint, so that fissures enter the joint, which can be ascertained without difficulty. In this case, too, it is advisable to delay amputation till the arrival of the patient at the hospital, if it be near. 8. When the tibia and fibula have been fractured and extensively shattered by a ball. Under various favorable circumstances, however, the leg may be preserved in this case. 9. When the tibia alone has been shattered to a large extent. In this case the leg may possibly be saved, but this is not very probable. 10. When the ankle-joint has been perforated by a ball in one of its longer diameters, so that extensive shattering or splintering of the tibia or astragalus, or of both, may be inferred to have been produced. Simple grazing shots, with opening of the synovial membrane of the ankle-joint, admit of conservative treatment, with the exception of those cases in which a great portion of the malleolus externus has been lost; an injury which causes the foot to take the shape of a valgus, and makes it useless. 11. When the anterior part of the foot has been crushed by heavy shot. The only lesion of the foot by rifle-balls, requiring amputation, is shattering of the astragalus, as a component part of the ankle-joint.

An Anomalous Affection—was it Hydrophobia?

By H. C. Paist, M.D.,
Of Philadelphia.

On Friday morning, October 4th, 1861, I was called to see Lewis Devoe, and on inquiry of his brother, I found that he was about forty-four years of age; that he had been for over a year on board his vessel acting in the capacity of cook, that his health as a general thing was good, though not a robust man, his health having been much injured by intemperance, but for the last year he was very temperate, drinking little or none. On the morning of October 3d, he complained of a peculiar itching and burning over the body, extending to the tips of his fingers and toes; he said this sensation was wave-like, rolling from the centre to the extremities, and remarked through the course of the day that he felt occasionally a choking sensation and pain about the glottis—felt generally prostrated and dull; did not care to be on deck, but preferred solitude, moving about with unusual caution. His brother prevailed on him to take some brandy, thinking it would stimulate him and instill new vigor into his frame; he gave him part of a glass, and for the next half hour, being engaged about the vessel, took no notice of him, but found at the end of that time that he had taken only a tablespoonful of the brandy—ques-

tioned him as to the reason, but he did not seem able to give one,—only it seemed impossible for him to drink any more. On the morning of Oct. 4th, the symptoms narrated, becoming greatly aggravated, appearing to be in great distress, his brother became alarmed, and had him taken to the place above mentioned. The symptoms now noticed, were violent convulsive tremors of the whole system, most piteous groaning and shuddering, intermitted with only momentary calms, mind perfectly clear, questions were answered rationally, but with hesitation and violent shuddering effort, the expression of countenance was that of a man suffering the most intense tortures imaginable. I asked him if he had pain, and with a great effort he answered, "no, none except a little about the throat and stomach," which he accounted for from frequent efforts to discharge phlegm from his throat, which efforts sounded like violent retchings; I inquired as to the condition of the bowels, and was told that they had not been moved for five days, not since he had taken a dose of anti-bilious pills to remove a headache; which operated freely, and he said did him much good. His pulse was about 90, weak and somewhat intermittent, extremities cold, in fact the whole surface of his body was below the standard temperature. He also complained of the itching and tingling mentioned by his brother; the least touch on his person by another would throw him into the most violent jactitations from head to foot, with dreadful choking, and earnest appeals, "don't, oh! don't touch me." I noticed a wash-bowl near by his bed, containing about a half pint of saliva; I directed his attention to it, and asked him if that was *water;* the mention of water convulsed him to a dreadful degree, and he cried out don't! dont!! Not wishing to fill those present with alarming apprehensions, I endeavored to calm him by dropping the subject. I ordered him pills of morphia and assafœtida, and after giving some other directions, left him, promising to return in the afternoon. On my second visit, I found all the symptoms aggravated. I no longer kept my suspicions to myself, but let the family know them, and requested of the brother the privilege of bringing in another physician. I called in Dr. H. Rihl, and we made a number of experiments, such as offering him water, pouring water from one vessel into another, took a lighted candle before him, directed his attention to a looking-glass which was in the room, fanned him in the face, and again behind him when he was not aware that any one was about to fan him, slipped around behind him and touched him, struck the floor with a cane, and many other trivial experiments, all with the same result, followed by the most violent and shocking contortions of the whole body, choking and copious expectoration of saliva. We asked him if he suffered pain in any way, his answer was "no;" we then asked if he had been bitten recently by a dog or any other animal, his answer was, that 18 or 20 years ago, a watchman's dog near Coates and Front streets, had bitten him, but the condition of the dog he did not know, nor never heard afterwards. He had not taken many of the pills—could not swallow them; we tried to get him to swallow one, but without success, the very thoughts of swallowing appeared to convulse him. At this visit, we directed a blister along the whole extent of the spine, to be followed by a dressing of morphia. Called again at 10 P. M., found our patient worse in every respect, mind wandering slightly, pulse weaker and more frequent, extremities cold, general distress increased, convulsive jerkings much more frequent, spitting large quantities of saliva all around him on the bed or on the floor, or anywhere; this we noticed particularly from the fact of his observing much care on our previous visits where he spat. We endeavored to give him chloroform by inhalation, but with ill-effect. He seemed to have an idea that we were trying to smother him to death, indeed he seemed apprehensive of danger from every one around him; however, by much perseverance we succeeded in getting him to inhale enough to slightly quiet him. We directed his brother how to use the chloroform, and left him promising to make an early call the next morning, and on calling were informed that he had died about 4½ A. M. Were told that chloroform was kept almost constantly to his nose, but without much effect, he died in a sane state of mind, the symptoms continuing to death.

My object in placing this case before the medical world, is, to ask, was not this a genuine case of hydrophobia, resulting from the bite of a dog eighteen or twenty years ago? (for he declared that that was the only bite he had ever received from an animal,) if not, what was it?

—o—

The Late Arctic Expedition records that the greatest cold experienced by them was sixty-eight degrees below zero.

Notes on the Narcotics.

By Edward Parrish,
Lecturer on Pharmacy, Philadelphia.

An experienced medical practitioner, in a recent letter to his office student, in attendance on medical lectures, advises him to acquaint himself thoroughly, during his term of sudy, with affections of the nervous system, as upon a thorough kuowledge of these, and their treatment, his success in practice would mainly depend.

That this advice accords with the prevailing ideas of physicians, is especially obvious to the pharmaceutist, who, in comparing the recent prescriptions, on his files, with those of twenty years ago, cannot fail to notice the increased use of medicines primarily affecting the nervous system, instead of mercurials, drastic cathartics, blisters, and the like, formerly so much relied on.

From an analytical table of prescriptions which I prepared some five years ago, from my own files and those of several pharmaceutical friends, it appeared, that on an average 24 per cent. of the prescriptions examined, contained either opium, morphia, or hyosciamus, in one or other of their preparations, while the mercurials of all kinds, of which blue pill is now by far the most popular, were directed in 23 per cent. of the prescriptions; iodine and iodide of potassium in only 6 per cent., and though the files were examined with reference to the different seasons of the year, cinchona, and its alkaloids, only appeared in 9 per cent. of those written in Philadelphia. The preponderence, here shown, would, probably, be greatly increased in case of the preparations of opium, if the medicines dispensed without prescriptions were taken into account. Laudanum and paregoric are found in almost every dwelling, at all provided with medicines, while the great variety of carminatives and infant cordials, given so indiscriminately and so injudiciously, nearly all contain opium as their most active ingredient.

In estimating the reliance placed by physicians upon narcotics, by the data above given, allowance must be made for their extensive employment as correctives of the undue influence of agents primarily affecting the secretions. This is, indeed, one of their chief uses in prescribing, and in the case of opium, especially is, perhaps, often resorted to from habit, rather than from any indication in the symptoms.

Next to opium hyosciamus is the most popular of the class of cerebral stimulants; its relaxing effect upon the bowels, secures its substitution for opium in very many instances; as an alterative, also, it shares with conium, belladonna, and stramonium, considerable reputation in appropriate combinations. The prophylactic effects of belladonna, its asserted specific influence on certain eruptive diseases, and its well known usefulness is opthalmic surgery, give its extract and alkaloid, atropia, prominent positions in the class. Conium is not unfrequently prescribed with sarsaparilla and the mercurials, while stramonium is less in repute for internal use than in ointments applied to hœmorrhoids. Stramonium leaves are much employed for fumigation in asthmatic affections, a practice frequently productive of speedy relief, notwithstanding its alkaloid, daturia, is not volatile; that of conium being freely so its leaf might be supposed to furnish a much better material for the fabrication of asthmatic paper and segars. Another eligible mode of administering this class of remedies, especially those containing volatile principles, is by inhalation in connection with the vapor of water; the inconvenience of the method and the want of suitable apparatus have sometimes operated against a trial of its merits; there is no real difficulty, however, in adjusting a good inhaler, when not readily accessible, by the use of a wide-mouth bottle and glass tube.

Of all the narcotics, none has received so great an impulse, in our time, as Indian hemp. The incredible stories recorded by travelers in relation to the effects of *hashish* on the impressible natives of the East Indies, have given it a world-wide notoriety as an intoxicant, while the efforts of certain empirics, among us, who have advertised it extensively, under the plea of disinterested humanity, have drawn the attention of thousands, both in and out of the profession, to its availability in the treatment of phthisis. The extract of cannabis has, certainly, become one of the most popular, as it is one of the best of its class; its chief advantages are the exhilaration which accompanies, or rather precedes its complete narcotic effect, the remarkable control it exerts over nervous inquietude and the absence of any noxious effect, either in diminishing the appetite, checking the secretions or constipating the bowels. The quality of the preparation is so varied, that physicians are often quite uncertain what dose to prescribe; some specimens seem nearly

inert, while of others half a grain is a powerful dose, and a grain has produced alarming symptoms. It is always best for the physician to assure himself beforehand on this head. It should be of a bright green color, heavy narcotic odor, and entirely soluble in alcohol. Squire's London manufacture is esteemed the best. In prescribing extract of cannabis, in liquid form, the most approved combination is with carbonate of potassa, which renders the extract soluble in water, otherwise, dissolved in alcohol, it readily separates on being added to aqueous and even mucilaginous preparations. I have met with one case only in which extract of cannabis produced those extraordinary hallucinations to which I have referred as being ascribed to *hashish* in the East. This patient, a consumptive, was often possessed with an idea of his own duality, seeing horrid visions of detached portions of himself. He seemed to be continually haunted by the presence of an imperious director, on whose behalf his most trifling acts were performed. At times, even in the act of expectoration, he believed himself the agent of another for whose sufferings he felt the keenest sympathy.

The very extensive use made of lobelia and sanguinaria in this country, would, I think, surprise our transatlantic colaborers. The combination, in these remedies, of narcotic with emetic and diaphoretic properties, fits them for a great variety of indications, though they seem to me by no means so safe and harmless as some rather adventurous prescribers seem to suppose. A plant of the famous solanaceæ family, to which belladonna, stramonium, and hyosciamus belong, yields us the alterative narcotic dulcamara, of which we have only two preparations in the Pharmacopœia—the decoction and aqueous extract, neither of them very eligible or apparently satisfactory to the profession.

One very prominent element in the popularity of a remedy is its pharmaceutical eligibility, and there is little doubt that the neglect into which many valuable drugs have fallen is due chiefly to their not being presented to the practitioner in an eligible shape. Since the general abandonment of the crude and inelegant class of infusions and decoctions, there has been a manifest tendency to employ more concentrated and reliable preparations; but the Pharmacopœia, never in advance of the demands of the profession, has given no formulas in the cases of many of the most valuable. That this may be partially remedied in the edition now under revision by the eminently judicious and conservative committee appointed in Washington some eighteen months since, is greatly to be desired.

Fluid extracts are now loudly called for on all hands. That many of this class of liquid preparations originated, and have come into use through the commercial enterprise and activity of certain manufacturing pharmaceutists, not amenable to the careful scrutiny of the profession and the public, and whose processes are too uniform to be properly applicable to every drug, is no argument against the excellent scheme of concentrating liquid preparations to such point as that their dose shall have the same relation in each case to that of the drug from which derived. Modern pharmacy, with a full appreciation of the composition of almost every drug known to the profession, is now prepared to adapt solvents to each, which will fully extract its medicinal principles, discarding those which are inert, and, by processes of evaporation within the reach of every apothecary, to reduce these to concentrated and permanent forms. The alcohol is sometimes an objection in tinctures, from therapeutic incompatibility, while in syrups, which are always given in comparatively large doses, the sugar is equally objectionable. Fluid extracts, besides the advantage of correspondence of dose with that of the drug, contain a minimum of either of these antiseptic ingredients. They are, however, best adapted to drugs the doses of which are not very small, and I can see no advantage, for internal use, in more concentrated liquid preparations of the powerful narcotics than their tinctures already furnish, especially as the solid extracts are so easily incorporated with extemporaneous mixtures. The imported preserved juices are not recommended so much for greater concentration as for their careful preparation directly from the fresh expressed juice of the plant before it has been altered by any processes of drying and subsequent treatment with menstrua.

In this connection it may not be out of place to notice some facts in regard to the preparations of opium, of especial advantage in those cases in which Laudanum is contraindicated by its nauseating effects and the disagreeable symptoms produced as its effects are passing off. McMunn's elixir has attained a place among the popular preparations of opium from the absence of these objectionable qualities,

and the only obstacle to its use by physicians lies in its being a nostrum, the mode of preparation of which is carefully concealed. The prevailing opinion among pharmaceutists appears to be that this is an aqueous preparation, to which, after its completion, a very little alcohol is added to prevent decomposition, and, on this principle, numerous elixirs of opium are offered, though, as might be expected, McMunn's still takes precedence. The aqueous extract is a preparation well worthy of a fair trial in competition with the drug itself, or its tinctures; on theoretical grounds, it gives promise of good results. I have met with practitioners who unhesitatingly give the preference to black drop and acetated tincture of opium, which they recommend as greatly preferable to the ordinary liquid preparation, while certain confirmed opium-drunkards give their testimony in the same direction, asserting that these preparations, containing morphia as acetate, produce less emaciation from their habitual use than those containing the natural salt, meconate of morphia. On the other hand, I have lately imported from London an elegant preparation called solution of bi-meconate of morphia, resembling McMunn's elixir, though still more completely deprived of odor, and apparently quite free from the usual objections to laudanum.

What is the dose of the morphia salts? One-eighth of a grain, say the older books and prescriptions; one-third of a grain, say recent authorities; one grain, say now a great many physicians, not only here but elsewhere. Formerly I hesitated to compound a prescription calling for this dose, now it is so frequently prescribed and administered, that we begin to regard it as safe, and cannot help setting down the fact as an offset to the asserted lessening of doses to meet the demand of the times.

—o—

Sudden Changes in the Color of the Hair.—At a meeting of the British Association for the Advancement of Science, Dr. John Davy a read paper on this subject. He drew a comparison of some changes which occur in the feathers of birds and the hair of animals, and urged that the changes of color of hair were rather due to displacement of structure than to modification in its color. Physiologically there was no proof, in his opinion, that the hair ever changed color suddenly from mental emotion. He had immersed hair in caustic potash, exposed it to chlorine and other agents, without producing any sudden change. It was, therefore, scarcely to be conceived that the human subject could secrete a fluid capable of affecting the hair by discoloring it.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. J. F. Meigs.

Oct. 19, 1861.

GONORRHEAL RHEUMATISM.

This was the case of a man, thirty-six years of age, admitted on the 8th day of September; had been sick a week before he came with rheumatism of both wrists, which were exquisitely painful and tender to the touch; could hardly bear to have them moved, and any movement gave the keenest pain; they were swollen; scarcely any fever; no cardiac complication; there is some inflammation, and swelling of joint of middle finger, with erosion of cartilage perhaps. Desiring to make further trial of a remedy which has proved exceedingly valuable in the treatment of acute rheumatism in this hospital, he took propylamine, 3 grains, every four hours until the 16th of September, together with the usual local applications, but the disease persisted. He was then put upon the alkaline treatment, and took acetate of potash, 15 grs., water, 1 gill, every four hours, with four grains Dover's powders until the 26th. But the pain was still persistent; it obstinately refused to yield to the usual treatment of rheumatism.

Suspecting gonorrhea, he was next put upon the use of equal proportions of bichloride of mercury and iodide of potash, together with mercurial ointment and belladonna, and he is now improving. He tolerates better the manipulation of his wrists and arms; the swelling is subsiding. He has also taken the compound tincture of gentian, with the citrate of iron.

This affection attacks the joints, and its peculiar characteristic is that it is not movable. Unlike other forms of rheumatism it fastens upon the joint, and refuses to yield to any of the ordinary methods of treatment. The extreme acuteness of the pain attending it is another characteristic, and those together may be considered pathognomonic.

CANCER OF PANCREAS.

This case was a female, forty-nine years of age; for nineteen years a cook; always enjoyed good health; never sick in her life till about three months before she was admitted to the hospital on the 21st of Sept.; came in from the country; had severe jaundice; skin very deep color, almost olive green from the presence of coloring matter of bile; had vomiting; some pain, and soreness of epigastrium and in back; abdo-

men somewhat distended; rounded projection of the lower third; no enlargement of liver; urine overloaded with bile; stools white, even lighter than clay; bowels costive; a peculiar symptom of the case was a blowing sound observable over the aorta, in the epigastrium, which I could best account for by supposing a tumor, or enlargement of the pancreas; indeed, this blowing sound may almost be considered as pathognomonic of tumor of some deep-seated organ. The jaundice was, no doubt, occasioned by the occlusion of the common duct of the liver and this by the pressure of the enlarged pancreas upon that organ. As the disease progressed, the pain was very deep in the back, she said; stools more yellow; skin more deeply colored; great loathing of food, and as the occlusion of the gall ducts became more complete, she became drowsy, delirious, and on Saturday last she died.

Post Mortem.—*Liver* diminished in size, but without any tuberosities or nodosities; hepatic duct enormously enlarged; had the appearance of a liver in which the bile has been entirely dammed up.

Duodenum—Upper section healthy, common duct of liver opening into it enormously enlarged; usually one or two lines in diameter.

Pancreas—Exhibiting all characteristics of carcinoma; white, fibrous, creaks under the knife, hard, enlarged; under the microscope the peculiar cancerous cells are plainly observable.

Some small quantity of fluid was found in the abdomen, but evidently of recent occurrence.

The lecturer, in concluding his clinic, gave the results of a microscopic examination of the liver, and a portion of its substance by Dr. Morton and himself, and exhibited to the class some elegantly colored drawings of same disease, or similar, drawn by a foreign pathologist.

CANCER OF ŒSOPHAGUS.

A woman, forty five years of age, admitted on the 8th of October, with tumor of neck of some months standing; four months ago she began to experience difficulty of deglutition; a month after the tumor made its appearance, and has been rapidly increasing since. That it was connected with the œsophagus seemed evident from the fact of the constantly increasing difficulty of swallowing and from its locality; the tumor was hard. On the 14th of Ootober she had stridulous respiration, but no alteration of voice. This peculiarity of respiration was unlike the croup, there was no inflammatory action, nor exudation of false membrane, and yet the disease seemed now to be complicated with some laryngeal difficulty. An opening had been made from the tumor into the larynx perhaps. The prognosis was unfavorable from the beginning, and death soon came to her relief, and I am able to point out to you the exact pathology of the case.

Post Mortem.—A section of the œsophagus in its superior portion exhibits a mass of fungus growth, nearly filling up the entire cavity. It is a white medullary substance, undoubtedly of cancerous structure, which so nearly closed up the œsophagus, as to leave an opening scarcely larger than a crow-quill. In the trachea, which exhibits no other traces of disease, we find an opening, which was probably made four days before she came here, and gave rise to the peculiar respiration before spoken of. The superior portion of the sternum and the lymphatic gland lying on its posterior surface also exhibit traces of cancerous deposits. Cancer of the œsophagus is a rare affection.

October 26, 1861.

CHRONIC RHEUMATISM.

A female, twenty-six years of age; widowed; in good health when married, though never very strong; had two miscarriages, at four months; last two years and a-half ago; since which had neuralgia, pain and weakness in the back and side. On the 4th of April last she was admitted to the hospital, for rheumatism, and in July was transferred to the surgical ward to be treated for piles. On the 6th of October was returned to the medical ward unimproved, so far as the rheumatic affection was concerned; her tongue was red, with a disposition to glaze and become dry, which is always indicative, to me, of a diseased stomach, or dyspepsia. She had no vomiting, no tenderness of the epigastrium, no gastralgia: she was anemic, and seemed to have no energy of mind or body. A peculiarity of her symptoms was severe pain in feet and ankles; extreme tenderness to the touch, or upon the least motion, and inability to walk. There was upon her left ankle an eruption of an erythematous, dark, copper-colored appearance, with desquamation of cuticle over a portion of its surface; no cardiac complication; no fever; lungs sound. The case is somewhat obscure, and difficult of treatment. She has been in the hospital seven months, and, until now, without much improvement. Her feet and ankles are now less tender to the touch; she can move them more readily; she can bend her knees, and she can stand upon her feet; her appetite is improved, and she sleeps better at night.

Such cases you will find, in your practice, not unfrequently, obstinate, persistent, refusing to yield to treatment. Despite all your philosophical reasoning, and the scientific application of remedies, you will find yourselves baffled by the persistency of the symptoms you seek to alleviate; but this should only stimulate you to still more careful examination of your case, to more thorough investigation. In the case be-

fore you to-day, then, what occasions this obstinacy? Can it be syphilitic? Such are my suspicions; whether such be the fact I do not undertake to assert, and the physician ought to be careful how he gives currency to suspicions in regard to the presence of such disease. Not only his own reputation, but the character of his patient is at stake, which latter, especially if it be a female, may be blasted forever by the breath only of suspicion. He may have his suspicions, however, and he may regulate his treatment in accordance with them, without communicating them to any one.

The treatment employed in this case, and under which improvement is taking place, is the following. She has taken: Bichloride of mercury, one-twelfth of a grain, iodide of potash, 5 grains—three times a day, until the 24th, when, finding the gums slightly touched, the bichloride was suspended, and the iodide continued alone. She has also taken infusion gentian, 2 drachms, citrate of iron, 3 grains, three times a day.

This two-fold treatment, by specifics and by tonics, seemed to be required by the peculiar nature of the disease. She has taken, also, cod-liver oil, a tablespoonful on going to bed at night, it being less likely to occasion nausea and vomiting taken at that time. As to diet, ask the stomach what it desires, and, with proper instructions as to quantity, the food craved may be given.

INTERMITTENT FEVER WITH ALBUMINURIA.

This was the case of a female, forty-five years of age, admitted to the hospital on the 14th of October, for intermittent fever; had been sick for three weeks; well-marked chills and fever; she was weak, languid; no appetite. She took four grains of quinine, four times a day; made no improvement. On close examination, I observed a slight puffiness of the eyelids, and a slight edœma of the ankles, with slight pitting; a little infiltration into the subcutaneous areolar tissue; These appearances were very slight indeed, but yet plainly observable to the practiced eye; the upper edge of the eyelid is now slightly transparent. An examination of the renal secretion disclosed the presence of albumen, and the microscope showed the tube casts, small, epithelial. She was immediately placed upon the use of tincture chloride of iron, 15 drops before each meal, and five grains of gallic acid after meals, together with the compound powder of jalap, quantum sufficit, to keep the bowels free. She is now improving. Test of urine by heat and by acid, gives very small quantity of albumen. The diet should be nourishing.

Note.—Several annoying errors have occurred in the clinical reports which have already appeared in the Reporter, which we take occasion to point out, though many of them are so palpable that the intelligent reader would readily observe and correct them.

In No. 3, page 58, second column, 14 lines from bottom, read *eight ounces* instead of "the ounce."

In No. 4, page 82, first column, 5 lines from bottom, read *castor oil* instead of "*turpentine*," add "*with* 10 *drops of turpentine*;" page 83, first column, last line, read *bark* instead of "*iron*;" second column, fourth line from bottom, read *necrosis* instead of "destruction;" page 84, second column, six lines from top, read *one-sixth* of a grain instead of "*six grains*;" first column, 21 lines from bottom, read "v" instead of "ij."

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

Doctor Daniel Ayres, President.

October 22d, 1861.

Drs. Sayres and Bauer's

Case of Returning Cancerous Disease after Amputation.

Dr. Bauer placed before the Society a series of pathological specimens, consisting of:

1st. The stump of an amputated left thigh, removed at the hip-joint.

2d. The heart, with appending vessels and pericardium.

3d. A flat, oval tumor, about 3 ⋈ 4 ″, removed from the anterior surface of the left 8th, 9th, and 10th costal cartilages.

4th. Smaller tumors from different parts of the body.

In order to illustrate their original appearance in size and color, Dr. Bauer exhibited highly finished wax casts, prepared soon after death, from the specimens.

At the end of the stump, immediately above the cicatrix, there was a convolution of tumors, not less in size than a man's fist. Each nodule was as large as a walnut, and intimately joined with the others, adherent to the skin and loosely connected with the deeper parts. The skin was greatly discolored, bluish-red, and so rarified that the subcutaneous mass and its light yellow color could be perceived. The lowest nodule was implicated in the cicatrix. It was excoriated, and had been freely bleeding. The tumor, together with the cicatrix, exhibited a vermillion discoloration.

At the apex of the pericardium was a large and soft mass of cancerous material, which had almost penetrated it. In the front wall of the right ventricle was a small cancerous growth, slightly projecting beyond the surface; corresponding with this, there were three tumors, encroaching upon the right ventricle from between the fleshy columns.

The tumor from the thorax had originatod in the connective tissue of the peri-chondrium, and had penetrated the left rectus, spreading over it, and approached very near to the integumenls at one place. This, as well as the small tumors, was already softened, and the microscope revealed little more than a fatty metamorphosis.

In addition were found a large number of heterologous growths over the pleurae. Most of them were very flat and soft, and not unlike mushrooms.

These specimens were removed from the body of the same gentleman, whose case had been discussed

at a former meeting of the Society—May 28th—and which had enlisted so much interest on account of the doubt in the diagnosis. Whilst referring the Society to the transactions of that date, published in full in the Medical and Surgical Reporter, he reminded the members of the peculiar, soft, and brainlike material that filled the entire articular cavity of the knee-joint. The similitude of the same to softened cancerous structure had been striking to the naked eye, but its intensity had been proven by the microscope beyond the shadow of a doubt. Notwithstanding the microscopic results, clinical considerations prevailed in preferring *another* diagnosis, namely that of enchondroma. It should be borne in mind, that the articular tumor had been the *first* in the limb, that it was the *direct effect* of traumatic injury, to which it had been repeatedly subjected, until its size increased, and its *hard consistence* changed into a soft material. Further, that some six or eight hard, oval, and disconnected encysted tumors had successively formed in various parts of the extremity, near tendons, which, when microscopically examined, were recognized by some as enchondroma. (Prof. Jacobi, Noegerrath and himself,) and by others as sarcomatous, (Drs. Schnetter and Prof. Daniel Ayres.)

In consideration that both enchondroma and sarcoma may undergo structural disintegration, and by a process of fatty metamorphosis, may assume an appearance in every particular identical with encephaloid; further, that the articular tumor had once born the same peculiarities as the consecutive ones; again, that it was a common thing for enchondromata to appear in great numbers, whereas, primitive encephaloid most usually locates in one place—these and other considerations had prevailed in pronouncing the disease as enchondroma; yet he had not been positive in his opinion, which he qualified as bearing discussion.

The specimens now before the Society was the best proof of the error then committed; they were encephaloid cancer in the most exquisite form. The patient had made a comparatively good recovery from amputation. Slough having occurred in the wound, the latter had closed by granulation. In July he rose from his bed and walked freely about with the aid of crutches. In the beginning of August the stump was in so satisfactory a condition as to render the order of an artificial leg practicable. Soon after, the patient went into the country for the purpose of recuperating his shattered constitution. Thither Dr. Bauer had accompanied him. In the latter part of August, two small nodules were simultaneously noticed, one in the stump, the other at the cartilage of the ninth left rib. When first seen they were scarcely larger than a pea, and firm.

Their growth was so rapid that they had attained the size of a walnut before a week had elapsed. The disease increased from that time, invaded the inguinal glands of the affected side, and soon made its appearance in the organs of the chest. The dyspnœa was great, yet the respiratory murmur was almost clear, and the resonance not very greatly dulled. With a rapid pulse and increasing respiratory difficulties, the patient gradually sunk, and expired in the middle of the present month. Within seven weeks, the cancerous process apparently recommenced. The morbid material was unusually soft, and seemed to have entirely broken up in fat granules, scarcely leaving a trace of its characteristic cellular structure.

Thus far, the case seemed not to present any peculiar features. It may be said that the primitive cancer, returned after amputation, and as is the usual way, it returned in a softer form. Yet in this easy way the case could not be disposed of, nor the discrepancy of the previous diagnosis solved, or the course of the disease reconciled with established notions.

Heretofore the opinion had prevailed that cancer was a disease sui generis; that it was distinguished by the peculiarity of its developments, structure, growth, and termination; that benign tumors could neither grow upon a cancerous subject, nor be turned into malignant ones, etc. Dr. Bauer made no pretensions as a microscopist, and certainly placed no positive reliance upon the results of his microscopic investigations. If he had succeeded in ascertaining the exact structure of the articular mass, it had been due to the perfection and multiformity of its cells. But the discrepancy in the diagnosis arose from the presence and structure of the consecutive tumors. Dr. Schnetter, a most proficient microscopist, pronounced them unequivocally to be sarcomata, and his opinion weighed heavily in forming the diagnosis. Certainly nothing presented itself in those tumors that came near to cancerous structure, and when their mode of growth and their apparent dependance on the articular tumor was considered, it was almost impossible to consider it cancer. Nevertheless, the cancer, and consequently the error of opinion were but too clearly demonstrated by the specimens. The question arose, therefore, whether the established notions of cancerous disease were at all correct, and did not require a careful revision.

The best microscopists and pathologists deny at the present day the existence of a cancer cell. Virchow most emphatically assures us that he has never seen a cell formation in cancerous structure of peculiar attributes. Bilroth, who likewise has paid great attention to the minute structure of cancerous growths freely admits the impossibility of classifying tumors from their microscopic appearance, and therefore has returned to the clinical distinction in which the microscope occupies but a small space. He alludes to instances in which the same structure may be benign in one case and malignant in another. And again, Virchow demonstrates that simple connective tissue with its natural cellular bodies, may become the focus of any structural metamorphosis, and sees no reason why one should not change into the other. According to him, cancer is by no means a characteristic, a strictly defined, and under all circumstances the same process. What in one place of the body and at one time may be perfectly healthy structure is cancer at another place and at another time; nay, even the hyperplasy of cells does not apply to all forms of cancer, as, for instance, in scirrhus, the most pertinacious of all, the proliferation of cells is very scanty.

These remarks though fragmentary, Dr. Bauer thought of sufficient strength to engage our attention, and to indicate that the chapter on cancer was by no means as yet completed.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

DIPHTHERIA.

In the *Chicago Medical Journal*, for July, Dr. J. J. Morgan, of Windham, Iowa, has an article upon diphtheria, in which some opinions are expressed not in accordance with those usually held; and yet, in regard to those now referred to, we believe them to be correct. He says he has treated over two hundred cases, and "the first and main thing that I wish to notice here is, that death did not occur, in any single instance, where the false membrane was confined to the fauces, where the exudation did not extend to the larynges proper. But in all the fatal cases that came under my observation, the laryngeal symptoms predominated. The inquiry that suggests itself is: why does not death occur in those cases where the exudation is extensively developed, but confined to the fauces? Granting the supposition, which is probably a true one, that the disease depends upon some blood-poison; we are led to inquire, do the fatal results arise from the original vitiated condition of the blood, depressing the nervous centres as in malignant typhus? or are the aggravated symptoms and alarming fatality, due to a materies morbi, the result of an imperfect æration of the blood, consequent upon the obstruction offered to respiration by the local affection? I am led to favor the latter view of the case, based upon the experience and observation of over two hundred cases. And what I wish to maintain is, that patients die from the effects of local disease, and not from the virulence of a poison with which the blood is contaminated."

Our opinion coincides with that of Dr. Morgan. We always judge of the danger of a case by the severity, locality, and peculiarities of the local symptoms. And more, we have seen cases die with strength but little impaired, which we should scarcely expect would be the case if they died from constitutional disease alone. Further explaining his views, the Doctor adds: "The view I take of it is this: that where the constitutional symptoms are of an aggravated character, the more formidable will be the local disease, the more rapid will be its descent to the air-passages; thus seriously compromising the life of the patient. This is the experience that has fallen to my lot." We have seen cases where the pulse was but little affected, and the patients would not take the bed, and yet the tonsils would go on to gangrene and sloughing within twenty-four or thirty-six hours!

Bearing upon this pathological view, he says: "All that I wish to contend for in this connection is, that the constitutional treatment is secondary in importance to the local applications; for I believe the majority of severe cases would succumb to the local obstruction, ere the systemic remedies, were they ever so potent, could alter the crasis of the blood, neutralize its poisonous properties, and send a healthy flow of the life current to stimulate anew the depressed nervous system. That local applications do affectually arrest the disease, when used before the air-passages are too seriously implicated, I think a fair trial will abundantly prove."

He commences treatment with a mild cathartic, or an emetic, if the case is severe, and then, "either immediately preceding the giving of the emetic, or soon after its operation, I would apply to the throat, if the coating were very thick, lunar-caustic, in substance finely pulverized, touching only those parts which are covered with the exudation. If the coating is rather limited in extent, and not very heavy, a solution varying from fifteen to thirty grains to the ounce may be used. The applications will rarely need to be made more than twice each day, and continued until the false membrane ceases to be formed."

His general treatment is chlorate of potash, in from three to ten grain doses, every three or four hours, and from one to four grains of quinine, at mid interval of the other doses.

We have passed two epidemics, and have used a variety of local remedies, and must say that, though we commenced with the nitrate of silver, it never pleased us, and we often thought it was worse than nothing. We soon settled down upon a compound composed of a saturated solution of chloride of potash, with the addition of about one fourth of the muriate tincture of iron. This was to be applied with a rather large mop, made by fastening soft cotton-batting on a stick. We prefer this to a sponge or a brush—its simplicity and softness being its principal recommendation, and we required a new one for each application.

There is one condition where we have thought a few applications of nitrate of silver was of service, which condition we will briefly state. We have seen, in an epidemic that has been prevailing here for the last three months, cases unlike any that we have seen elsewhere alluded to. Some cases swell largely, both externally and internally, and the tonsils rapidly slough, in from one to four days from first visit, if that were made in from four to six hours from the first symptoms. When the tonsils sloughed, a deep excavation would be left that would often greatly increase by time—an

excavation that a good sized hickory-nut could easily be placed in. In one case this ulceration was very deep, and the patient finally died, quite unexpectedly, after he had been two weeks improving, in convulsions. We could not account for this sudden onset of fatal convulsions, except by supposing the disease had so extended as to affect the sensorial ganglia, or medulla oblongata. When the sloughing first takes place, we have made two or three applications of a strong solution of nitrate of silver, certainly with no perceptible injury, but later we preferred our usual applications of the chlorates of iron and potassa. Our general treatment has been uniformly as follows: chlorate of potash and the tr. chlorate of iron in a combined solution, but separate from that designed for local application, and weaker of iron—designing the patient, if an adult, to get about twenty drops in a table-spoonful. This to be repeated every four hours, and quinine in the interval, much in the doses recommended by Dr. Morgan. In the first three days, if there was much fever, Dover's powders, or morphine, was added to the quinine. We might add here that, to one of these ulcerative cases, in a patient under ten years, we go utterly without hope. We have another practical remark to make about these cases, but we are not quite through with nitrate of silver.

Dr. R. C. Houghton, of Richmond, Indiana, some of whose opinions we noticed a few weeks since, in a private letter to us, under date of September 21st, 1861, says, in regard to the nitrate of silver: "In all the cases which I have seen and treated, and they are now many, I have never used this remedy in any form, and I am glad to say that I have yet not lost a case of the disease, which has been under my own treatment and control.

More than this, I differ with all my colleagues in practice in this region upon this question,—they using the remedy, while I do not—while their success is not equal in the same number treated. I have, from the very first cases I ever saw, protested against the use of this remedy in the treatment, and have uniformly observed the application of it, rendered the patient worse." (As he has *never used* it, he has probably not *seen* much of its effects.) Dr. Houghton leaves us to infer that his opinions are novel upon this subject. We have read, we believe, all that has been said upon the treatment of diphtheria, found in the journals of this country, except such as have *seceded* since Uncle Sam has refused to bring them to us, and such matter from Europe as has come to us in the *Lancet, British and Foreign Medico-Chir. Review*, and *Ranking's Abstract*, and must say we find the profession about equally divided upon the subject—some thinking it the only valuable local remedy, and others condemning it as hurtful. In the *Maryland and Virginia Medical and Surgical Journal*, for May, 1860, Dr. J. Du Val condemns it in the strongest and most unqualified terms.

Quoting further from Dr. Houghton's letter, he says: "I have adopted a plan of treatment, which I have never seen published in the journals, and which I will give to you. It is both a local and internal remedy, and has a more happy effect, in my cases, than any remedy I have yet used, in soothing, and yet radically controlling the local manifestations of disease." . . . . . The following is the doctor's formula and directions.

℞.—Glycerini, f℥jss.
Pot. chloras, ℥j.
Tinc. ferri chloridi, f℥ij. M. ft. sol.

This is used three or four times a day as a local remedy, and may be given in doses of half a teaspoonful, or more, according to age of patient, every four or six hours, at the same time the patient is using tonics and stimulants, if demanded to sustain the failing energies of the patient." We believe this is perhaps as good treatment as can well be devised—certainly it is such, omitting the glycerine, as we have adopted after much reading, some thought, and bedside observation. We, however, give quinine in all cases of any severity, and nourishing stimulants, such as egg-nog, in such cases as we can get it taken. If we have not used the glycerine in the compound, we have added as much gum arabic as the solution would dissolve, that more of the local medicine might adhere to the surface, and be less momentary in its action.

When Dr. Houghton says that the *local*, or general use of a combination of the chlorates of potash and iron originated in his own practice, we think he is not correct. We have not the time to hunt up authorities, though we had not supposed the local application was original with us. Many have certainly advised a combination of the chlorates for internal administration; some with the addition of hydrochloric acid, others have added nitrous ether. Dr. A. S. Clark, in the *Ohio Medical and Surgical Journal*, for May, 1860, advised the local application of glycerine. We have several other recent papers before us upon this subject, but we must defer their analysis. We cannot afford to occupy all our available space with one subject however interesting. It might not be unprofitable to give, in one article, the various local and general remedies that have been recommended. Perhaps we may do that, when time is little more abundant for such labor, and our energies, enfeebled by recent illness, recuperate a little.

On looking back, we find there is one thought or suggestion in practice that we are anxious to present, and we solicit an early trial of it by those who *can* put in practice. In the country, we find an almost unyielding opposition to it; but, for ourselves, our faith in its propriety is very strong. Any operative procedure about the throat has been condemned by most autho-

rities. Of the severe cases here, we have had two classes—one in which the tonsils sloughed out, and the other in which they did not; in all other respects they seemed identical, except in those which did not slough, the false membrane was usually thicker and more wide spread than in the other cases. In both classes the uvula was greatly enlarged. In those cases in which sloughing did not occur, death was early threatened by suffocation. At first we began to tear off the thick false membrane, excise the uvula, and perhaps one tonsil. This was only done late, and to prevent immediate death. It, in every case, seemed to relieve urgent symptoms, and to prolong, but did not save life. We very early became convinced of the impropriety of removing the exudative membrane—a procedure earnestly advocated by most authorities. It seems to be a protection which nature has provided for the diseased surfaces, and cannot endanger life by its presence, except when it may be situated right at the epiglottis, and when there situated its removal is almost impossible. Reflecting upon all the circumstances, and rendered almost frantic with the discouragement of having lost our first three cases, we proposed to excise the uvula, and at least one tonsil *at the first visit.* This proposition met with great objection. However, we succeeded in carrying our point in nearly all the cases where we wished to so operate. We have never yet removed both tonsils. What is the result:—it was only until then that we began to save any of our severe cases, belonging to the two classes mentioned above. In the sloughing cases there was no sloughing on the cut side, while on the other a deep and ragged ulcer would soon appear. In both cases the side of the excision would be well in half the time required for the healing of the other side. Two rival practitioners, who did not succeed in getting a single case until we had treated more than twenty, condemned in unqualified terms, our operative treatment. They have since had two severe cases each, and all four have died! In the present epidemic, we have had about forty cases, out of which four have died—our first three, and tenth case. Our last case of death was in a very ignorant and filthy family, and consent to excision could not be had until too late to prevent deep sloughing. It is only in cases where the swelling is considerable, or there is a known tendency to ulceration, that we would recommend this procedure. We have, perhaps, operated in about one-third of our cases—the rest, excepting the first three, not requiring it.

Dr. Morgan says in diphtheria, "an entire suppression of the voice is rare." We have seen but one case. This was in a child of three years of age. The patient apparently made a good recovery, except this one symptom: was so as to be about the house and was discharged. It subsequently died suddenly. This was our second case.

A REMEDY FOR SEA-SICKNESS.

The surgeon of the steamship Great Britain, says, that after much experience in the treatment of sea-sickness, the remedy he has found most successful, is the nitro-hydrochloric acid, with sulphate of magnesia. He offers the following formula:

Dilute hydro-chloric acid,	℥ij.	
" Nitric acid,	℥i.	
Hydrocyanic acid,	gtt. xvi.	
Water, - -	℥viij.	M.

Two tablespoonsfull to be taken every three or four hours.

SMALL-POX AND GLANDERS.

M. Guillou maintains that glanders in the in the horse is the analogue of small-pox in man. He proposes, in order to test the correctness of his opinion, to inoculate the pus of confluent small-pox upon the horse, and thinks that glanders may henceforth be prevented by the inoculation of the cow-pox lymph.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, NOVEMBER 2, 1861.

THE TREATMENT OF FRACTURES OF THE LONG BONES BY EXTENSION.

The characteristics of the recent improvements in surgical appliances have been in their simplification of form, and the reduction of their number. This remark could be illustrated by a reference to the works of any of the old authors, or, more conveniently, to the illustrated *Armamentarium Chirurgicum*, in which are displayed innumerable and complicated contrivances for performing the simplest surgical operations. Comparing these thousands of instruments with the limited paraphernalia of the surgical mechanician of the present time, or with the still fewer instruments in actual use by practicing surgeons, the present simplicity of appliances required by the high state of the science and art, contrasts curiously with their complexity in the rude condition of ancient surgery. Instruments are no longer contrived with the object of taking the place of the manual dexterity which should be required in operating.

It has been well said by a recent writer on fractures, that "it is not in the discovery and multiplication of mechanical expedients that the surgeon of this day declares his superiority,

so much as in the skillful and judicious employment of those already invented." In no department of surgery has the simplifying of the mechanical requirements been more advanced than in the treatment of fractures; and now it is asserted, and, we believe, proven, by one of the most practical and ingenious surgeons of this country, that the only correct and philosophic treatment of these injuries is almost absolutely *without apparatus*.

The articles by Dr. Swinburne, of Albany, on the treatment of fractures of the long bones, as published in this journal, or read before the Medical Society of the State of New York, have attracted the attention of surgeons to the subject, and induced a repetition of his method in numerous instances. Such a revolution as he therein proposes in the treatment of fractures, which would displace from use so many popular contrivances, and require, in surgeons, the abandonment of so many preconceived notions, could hardly be accomplished in a short period. But time, which proveth all things, has been allowed, and practical and unprejudiced men now adduce their testimony in favor of the logic of the reformer, and attest their experience in corroboration of the results obtained by him.

In the treatment of fractures of the long bone, Dr. Swinburne relies alone on *extension*. Splints are entirely discarded by him, excepting when they are indispensable as the medium by which the muscles are kept on the stretch, and where this tension can be kept up without a splint, the seat of fracture is left entirely bare. For any other purpose. he asserts that "splints are worse than useless, if not absolutely injurious," and that "the practical surgeon requires no appliances for the treatment of fractures of any of the long bones, except such as are extemporaneously made."

Dr. Swinburne claims that, by extension, *the muscles themselves are made to act as perfect splints;* and it has been experimentally shown that when muscles are made tense, they are not liable to much lateral deflection without actual rupture of their fibres. It has been also demonstrated that the muscles surrounding a fracture cannot be so stretched as to produce a separation of the fragments. Thus surrounded by tense muscles which cannot be overstretched, where, asks Dr. Swinburne, can the fractured ends go, but to a proper contact? This has been illustrated on the cadaver by Dr. Swinburne. He dissects out cleanly all the muscles surrounding any long bone, carefully preserving their attachments; the bone is then fractured and extension made, when the broken ends invariably assume a normal position. If such is the effect of extension in the dissected limb, the general investment of the bone in the living subject with skin, fat, fascia, and connective tissue, should give more lateral support, and make its condition for adjustment still more favorable. Dr. Swinburne therefore asserts that the muscles and other investments of the bone, are the only true splints.

Besides the inutility of splints, they are proved to be absolutely injurious. When a bone is broken, either a projecting point or an angle usually exists, which presses into the muscles, thus painfully goring and irritating them. If splints or bandages are applied, the pressure on the prominence is increased. The lateral pressure of splints and bandages also prevents or interferes with the proper formation of callus. The same pressure on the muscles often results in producing adhesions between them and to other surrounding tissues, thus impeding mobility, and making the restoration of the limb to usefulness tedious. Splints are also said, by Dr. Swinburne, to unnecessarily encumber the limb, and prevent its proper exposure to the eye of the surgeon.

The simplicity of this plan of treatment commends it particularly to practitioners in the country, and to all on emergencies. To the military surgeon, at this time, it will be well to bear in mind, that he will be able, by this method, to accurately and securely adjust on the field a painful fracture of the thigh if strong extension of the limb be made with but a fence-rail, a musket, or from fixed points on the floor of an ambulance, and that the apposition will be as correct as if effected by the most complicated and costly apparatus now in use.

Dr. Swinburne's own experience, during thirteen years, in his method of treatment, has been large, and, as he states, invariably suc-

cessful. The plan has now received many practical tests by surgeons throughout the country who have decided in its favor. In this city it has the approbation of Doctor Gross, Doctor Agnew, and others. In recommending this plan to practitioners, we would refer for its details to the articles on the subject, by its originator, which have appeared at different times in this journal, and to his pamphlet on the subject.

EDITORIAL NOTES AND COMMENTS.

Obstetrical Æsthetics.—Perhaps some of the younger portion of our readers may have had sufficient "*court* practice" to enable them to relish some delicate advice, which has been recently offered on the subject. If their midwifery experience has been suburban, and of a Celtic or Teutonic cast, the hints offered will, by contrast, be more impressive.

Dr. Bedford, of New York, in his new work on Obstetrics, gives the following directions for professional conduct toward parturient patients:

"You approach her gently, and courteously, and enter into conversation with her, talking of any and everything, except of the subject directly connected with the object of your visit."

It may be difficult, indeed, for the practitioner, who has been roused from his repose at night, to attend an obstetrical case, to talk of anything else than the cause of the disturbance of his slumbers, and it may also be difficult to interest the patient in any other subject. However, "*any and everything*" is a wide range for conversational powers, and as it is deemed proper to talk only of matters very remote from the object of your visit, perhaps, as the occasion is often in the "very witching hours of night," something sentimental would be sufficiently remote, yet in accordance with the advice.

Having entertained the patient with "any and everything except the subject directly connected with your visit," the practitioner descends from the sublime to stern matters of fact, and proposes a vaginal examination, and is directed to deport himself in the following modest manner:

"While the nurse is arranging the patient, you will generally be requested, for the time being, to walk into an adjoining room; but if not, be careful that you occupy yourself with something else than gazing at the movements of the parties; take a seat, and turn your back; become thoughtful, as if lost in the solution of some great professional problem; or, if a book be at hand, open it, and improve your mind."

If the modest practitioner is unfortunately obliged to remain in the room, it might have been suggested that his white cambric may be conveniently used to conceal his blushes. Some ready "professional problem" for abstracted rumination at such a time might also have been proposed.

In connection with squeamish advice, we may mention the case of a practitioner in this city, who says that he is so sympathetic with his obstetric patients, that there is a remarkable sympathy between the patient's uterus and his own stomach, and that when the former contracts, his gastric organ does the same—synchronously with uterine expulsion, his stomach performs emesis.

Intra Capsular Fractures.—The able paper, on "Intra Capsular Fractures," read by Dr. George K. Smith, of New York, on Friday evening of last week, before the Surgical Section of the New York Academy of Medicine, will be published in successive numbers of the Reporter. It will form a valuable addition to surgical literature.

A discussion upon the subject takes place on the fourth Friday of November, which will also be reported for our columns.

Important Paper and Discussion.—At a stated meeting of the New York Academy of Medicine, Oct. 2, ult., Dr. Parigot read (by permission) a paper on "*Moral Insanity in Relation to Criminal Acts*," in the conclusion of which he submitted to the Academy the following propositions:

1st. That the disease, called *moral insanity*, is but an affection of the faculty of volition and instincts, attended by physiological symptoms.

2d. That the name of moral insanity is defective, because it bears no relation to the cause, symptoms, and results of that disease; and that it misleads the opinion of the bar concerning crimes committed under its influence.

3d. That the laws and rules concerning insanity relating to civil or criminal cases, ought to be put in accordance with the actual state of medical science.

4th. That no person ought to be considered as being of unsound mind, if physiological and mental signs cannot be traced and ascertained.

5th. That a reform concerning medical certi-

ficates is necessary to insure regularity in obtaining from courts or judges orders to detain a person as insane, and that no such document be admitted, unless containing, 1st, all the symptoms, whether amnestic, physical, physiological and mental, concerning the cases; 2d the diagnosis and prognosis of the observed disease.

A further discussion of the important subject of the paper is to take place on Wednesday evening of next week.

An Explanation.—In reply to the letter of Dr. J. W. Thompson, in the Reporter of Oct. 5, Dr. O. C. Gibbs writes us as follows:

I cannot quote in full what every writer says, however much he may desire it. So far as I do quote I quote correctly, and when I condense I endeavor never to misrepresent an author's views, and am not conscious of *ever having done so.* Now, I take it upon myself to say, that Dr. Thompson's charge is utterly groundless. The blunder is entirely with himself! If he will turn back to my article, he will find I quoted Dr. N. E. Jones, of Circleville, Ohio, as recommending belladonna in diphtheria. After concluding my notice of Dr. Jones' article, as somewhat pertinent to the subject, I quoted Dr. Thompson as having recommended the same remedy in *incipient sore throat,* and nothing more, and quoted the pith of his paper entire and correctly, in which what he did believe was distinctly stated! I said nothing of diphtheria in this connection. The most and all that can be made from the mention of these opinions in connection is this; if it is true, as Dr. Thompson states, that belladonna "is almost a specific" in incipient or simple sore throat, *then it may be true that,* as Dr. Jones alleges, it may have a favorable influence over sore throats in diphtheria.

Substitute for Tinctures.—Sir James Murray, in the *Dublin Medical Press,* after a long experience and investigation, proposes, as a substitute for the class of medicines known as tinctures, a liquid of highly carbonated magnesia and camphor. He finds that this combination by simple cold infusion, is quite capable of extracting the medicinal qualities of roots, leaves, seeds, and even gum resins, while the conservative and antiseptic properties of the camphor prevent decomposition, and sufficiently stimulate the stomach and absorbents, to secure the fullest expected effect. The tinctures, in common use are all made by a maceration of the active ingredient in proof spirit of wine. This method dissolves the active ingredients of the drug, but it is objectionable in that the potency of the spirit prevents the exhibition of the medicine in sufficient doses to effect the desired object, and requires dilution and repetition. The menstruum proposed by Sir James, obviates all these objections, and we see no reason why it shall not come into use.

Correspondence.

NEW YORK CORRESPONDENCE.

Interdum vulgus rectum videt; est ubi peccat.—*Horace.*

At a full meeting of the surgical section of the Academy of Medicine, last Friday evening, under the hospitable roof the urbane Prof. Wood, (James R.), Dr. George K. Smith read his ingenious and most interestingly instructive paper on intra-capsular fracture and its various relations to the capsule. I forbear going into the details of this lecture, which was listened to with marked attention and will be discussed at length the last Friday in November. Besides, I understand that, ere long, it will appear in the columns of your own paper. If the diagrams, sections, and perspective drawings of those dissections, made by Dr. Smith, be properly engraved, this most important addition to the surgical world will be duly appreciated abroad, and form a nucleus around the Journal that was fortunate enough to give it birth.

Up to the present time over one hundred and twenty students have entered the University Medical College for Instruction, which retains in vigor all its former lecturers, whose aim is lucidly to teach. There is, however, a new demonstrator. Dr. W. R. Donaghe, whose qualifications for imparting what he knows—and that not little—are only equalled by his desire to unfold the mysteries of the cadaver.

At Bellevue College all is doing well—some sixty students regularly attend—and the circulating opinion is, that success will meet halfway the efforts of those who projected the great scheme of the hospital and college. If called upon to give opinion, I should say the only thing I feared was, lest one professor crossed his brother's boundary line. That is, as two and three have the same subject, such as Obstetrics, Surgery and Anatomy; it is more than probable that land marks may be moved.

Dr. Mott being asked the other day, his opin-

ion of the state of affairs in this country, technically replied as follows:

"Sir, I grant you that the body politic has been severely lacerated, and I doubt not that the wound will heal eventually, but it will be by the second intention. There will always be a scar to mark the union of dissevered parts." Good for Dr. Mott!

Dr. Turner, of the Inebriate Asylum, at Binghamton, is silently and patiently active in the noble round of duty for his fellow creatures. The roof of this gigantic Institution is being covered in, and soon its walls will be prepared to welcome those who seek relief from firewater and its deadly consequences. Already have four thousand seven hundred and twenty-eight applicants made formal solicitations for admittance. Further comment is not necessary. Such a testimony is sufficiently forcible to demonstrate the vast utility of such an enterprise.

From what I know of the architectural proportions of this building, I do not hesitate to assert that, when finished, it will surpass any public edifice, for the alleviation of suffering, now in existence. Thought seems to have luxuriated in the fields of original conception. Harmony pervades its outline, symmetry, and vast dimensions. Hygiene will for ever dwell beneath its genial roof, and Dr. Turner's name become a synonym for patient industry, honest zeal, untiring energy, devotional charity, ubiquitous exertions, ceaseless labors, and a dictionary of unmentionable praises.

Gourmet.

A CASE OF PROLONGED RETENTION OF THE FŒTUS.

Bloomfield, N. J., Oct., 1861.

Messrs. Editors:—I send you the following case, which, if you deem of sufficient importance, you are at liberty to publish:

Mrs. L. B., became pregnant for the third time about the 1st September, 1860, having aborted once at about the third month, and once been confined at the full time, nearly three years previously. Gestation progressed naturally, the mother's form gradually enlarged, and the movements of the fœtus were strong and lively until the last of February, near the close of the sixth month, when, by some exposure, she took a severe cold, which was accompanied with considerable cough, and as she stated "it seemed to come from her very bowels." On Sunday night, the 3d March, immediately on retiring to bed, she was seized with a violent chill, which lasted nearly an hour, and she said "it seemed as though the child twisted itself up in a knot," and its movements were quite painful. From this time all motion ceased, and her form gradually diminished until about the eighth month. The womb could be felt just above the pubis, about as large as a good sized orange. As she felt considerable anxiety in relation to herself, I told her that probably labor would occur at the ninth month if not before, but that it was not advisable to do anything at present, especially as her health seemed usually good. But the ninth month passed and the tenth also, and as there were no indications of labor, through her request, I went with her to consult Prof. C. R. Gilman, of New York, who, after an examination, advised her, as I had previously done, to borrow no trouble about herself, to do nothing, but just console herself with the pleasing idea that she had probably done all she would towards peopling the country. That it would, probably, remain with her as it was, a hard, inert and inoffensive mass, that she would carry with her to the grave, though, of course, it might possibly yet come away. Thus it continued until the evening of the 8th October, about thirteen months from conception, and seven from the death of the fœtus, when she was taken with a chill, some slight pains, and a little show. The pains continued slightly during the night, and the os dilated a little. During the forenoon the pains increased in force and frequency, and the os dilated gradually, though slowly, and at about 2 P. M. she was delivered of the fœtus; and the placenta was easily removed. During the labor, except the first mere stain of blood, there was no hemorrhage. The waters had been entirely absorbed, and the flesh seemed devoid of all moisture. No decomposition had taken place either of child or placenta. A slight hemorrhage followed its expulsion. No trace of membrane could be detected. Convalescence was natural and rapid. Lochia continued about a week. There was no secretion of milk.

N. S. King, M. D.

Lancaster, Ohio, October 1861.

Gentlemen:—May I avail myself of the opportunity afforded to me through the medium of your columns, to publish a case which I think will be interesting to your readers.

Some years ago I was invited to Cincinnati by a medical friend of mine to see, what he called, an unusual case. He asserted he had not witnessed a similar case in the course of twenty years' practice. Arriving at the bedside we found a young lady about eighteen years of

age. At first view, she was in apparently good health, though laughing immoderately, with tears trickling down her cheeks, very profusely. I was informed that should I remain for two hours, I would find her next paroxysm would be a fit of crying, which would continue at least two hours, not consolable by any human effort. Her pulse, during the fit of laughing, was as low as forty, marked by strong intermission. The extremities were remarkably cold; a semicircle, of lead colored appearance, surrounded the under eyelids. At the expiration of the two hours, the paroxysm of crying came on. The heart and arteries were unusually excited. Her skin became dry and husky; a general heat pervaded her whole system; she seemed unconscious, her eyes glaring, and her tongue seemed partially paralyzed, A hectic flush displayed itself on the left cheek, which increased gradually to the size of a twenty-five cent piece. She made use of some unintelligible expressions, which were interpreted by the parents; she asked for water. The sobbing, sighing, and moaning continued during the next two hours I was present. At the conclusion of that period she opened her eyes and gazed furiously about, calling for her mother, inquiring where she was.

Shortly after, an instantaneous contraction of the muscular fibres took place. First, in the lower extremities, then gradually proceeding upward. After this, a cold, clammy perspiration issued, yielding a fetid odor; then she fell into a profound sleep, which I was informed would continue one hour. I determined to remain until I could witness all her symptoms. She has singing in her ears, vertigo when stooping, and a loss of memory. Occurrences, which had taken place years before, were more easily remembered by her, than those which had occurred but recently. On account of the unusual action of the heart and arteries, we gave the following prescription:

℞. Tinct. digitalis, two drachms.
Galbanum, spts. of nitre, each, one drachm.
Simple syrup, two oz.

A dessert spoonful to be taken every hour until the pulse shall be reduced to its natural standard. The third dose had the desired effect. We next commenced with the following:

℞. Fowler's solution of Arsenic, Hoffman's Anodyne liquor—of each one drachm.
Simple syrup, two ounces.

A teaspoonful three times a day. I saw her one month after in perfect health. She described to me the following symptoms, which she felt previous to her tedious and distressinh disease, which continued three months, with an intermission of six days between each paroxysm.

A numbness of her left hand fingers, moving up the arm towards the clavicle; next flashes of heat and cold along her spinal vertebra; then objects appeared in motion and very green to her vision. Shortly after vomiting, then a spasmodic affection of the stomach and midriff, (as she called it a double hiccough.) She immediately after became unconscious.

Edward Lynch, M. D.

Lancaster, Ohio.

NEWS AND MISCELLANY.

Appointment of Surgeons by the Governor of Pennsylvania.—The following appointments were officially announced at the Executive Department on Saturday morning:

Surgeons.—Wm. H. Taggart, Philadelphia; George S. Kemble, Harrisburg; Wm. J. Fleming, Philadelphia; Wm. Allen Peck, Montgomery; O. M. Robbins, Northumberland; Franklin Irish, Alleghany; John J. Marks, Mifflin; J. P. Wilson, Centre; D. Webster Bland, Schuylkill; Wm. H. Worthington, Chester; J. B. Laidly, Greene; Jonas W. Lyman, Clinton; F. S. Jaquette, Philadelphia; J. M. Allen, Delaware; E. Griswold, Mercer; Isaac D. Knight, Philadelphia; G. L. Potter, Bellefonte; J. L. Stewart, Erie; E. R. Scholl, Reading; Wm. H. Gominger, Philadelphia; J. R. Hays, Chester county; Wm. F. McCurdy, Philadelphia; Jas. L. Dunn, Crawford; J. N. Everhart, Chester; C. S. Widdifield, Montgomery; J. P. Hosack, Mercer; Wm. R. Blakeslee, Chester; Robert Barr, Indiana; A. W. Wright, Chester; R. S. Simington, Montour; David Merritt, Philadelphia; G. F. Hoop, Centre; Wm. H. Gunkle, Chester; John Mc Grath, Philadelphia; John G. Frow, Perry; Wm. R. Stavely, Bucks; Geo. B. Fundenberg, Somerset; A. P. Frick, Lancaster.

Assistant Surgeons.—William F. Robinson, Montgomery; J. P. McClearly, Northumberland; James McFadden, Philadelphia; Washington G. Nugent, Bucks; J. W. Anawalt, Westmoreland; Thomas B. Potter, Centre; Theodore Jacobs, Montgomery; William Morrow Knox, Berks; C. J. Siemans, Northampton; A. Owen Stillé, Philadelphia; A. W. Fischer, Northumberland; George W. Miller, Philadelphia; Theodore S. Christ, Lewisburg; Lewis C. Cummings, Philadelphia; W. Murray Wiedman, Lebanon; J. G. McCandless, Alleghany; A. W. Pittinos, Philadelphia; J. Bird Peale, Philadelphia; Charles W. Houghton, Philadelphia; John C. Levis, Beaver; A. W. Mathues, Delaware; J. S. Marbourg, Cambria; D. F. McKinney, Lycoming; George B. Lummis, Philadelphia; J. Stites Whildin, Erie;

Wm. H. Davis, Tioga; Robert B. Cruice, Philadelphia; George T. Weeseman, Dauphin; Thomas F. Duncan, Philadelphia; J. M. Junkin, Chester county; Philip Leidy, Philadelphia; J. H. Wintrode, Huntingdon; P. Wager Montgomery; Wm. Church, Crawford; Robert A. Christian, Philadelphia: J. F. Hutchison, Centre.

Dr. F. H. Gross, of Pittsburg, has been duly examined by the Board of Army Surgeons at Washington, and has been appointed by the President to the position of Brigade-Surgeon.

Warming and Drying the Air and Earth Floors of Tents.—A writer from one of the camps gives the following description of a simple and effective method which has been resorted to for the purpose of warming tents and drying the ground in and around them: A hole is dug in the centre of the tent, two feet in depth and diameter. This is walled with stones laid in soft clay, and covered at the top, with the exception of a small aperture for the introduction of fuel. For this aperture there must be a close-fitting door or cover, which can be opened and closed at pleasure. Across one side of the tent a trench is laid and covered with wood and earth through which the cold air is conveyed freely to the bottom part of this subterranean fire place. From the top of the same and across the opposite side of the tent, another trench is laid and carefully covered with stone and earth, through which the smoke and surplus heat is carried off. This is the whole machine. The merits of it are obvious. It is universally practicable. It can be introduced easily into any tent or dwelling. The economy of it costs only a few hours' work for three or four men. The convenience of it being entirely under ground it takes up none of the precious room of our small tents. The utility of it: it dries and warms the earth within, and even beyond the entire circuit of the tent, and thus prevents those damp, cold and unhealthy exhalations from the earth which are probably the chief cause of the ill health among soldiers. The tents are thus also furnished with a moist and genial atmosphere, the heat of which can be easily increased so as to meet the exigencies of the coldest part of the season. To realize the importance of this you must remember that the walls of our houses are only thin canvas—that they are so readily penetrated by cold, or heat or moisture, that the atmosphere within follows rapidly the changes in the condition of the atmosphere without. Indeed, so far as this is concerned, there is but very little difference between living under the tents and in the open air.

Ambulances.—There are now at, or in the vicinity of Washington, one hundred and thirty-three ambulances.

Cholera is prevailing extensively in India, and is making terrible ravages among the British troops.

Surgeon G. W. Hunt, furnishes the following report of diseases in the 10th Regiment, N. Y. Volunteers, at Fortress Monroe. Total strength 2120; number treated, 1312; no deaths. Among the diseases were, intermittent fever, 10; remittent, 23; diarrhœa, 552; bronchitis, 76; Rheumatism, 68; incised wounds, 37; ophthalmia, 13; otitis, 17; debility, 24; hemorrhage, 11.

Death from Umbilical Hæmorrhage.—This case is curious from the circumstances hereinafter mentioned. M. Homolle brought it forward at the meeting of the Paris Medico-Practical Society. The child was the issue of a marriage between *uncle and niece.* The latter was confined three times at the full period during the first thirty-two months of her marriage. She nursed all her children, and each time fell into the family way whilst nursing. The first child had, during the early months of his life, slight strabismus, and was somewhat backward as to his power of speaking. The second child went on well until it was four months old, when weakness of the legs was observed, which finally became confirmed paralysis. The child died at ten months of imperfectly marked whooping cough. The third child, the one who died of umbilical hæmorrhage, was born quite healthy, save a few convulsive movements, which were hardly noticed. On the eighth day ecchymotic stains were noticed under the child's nails, with a slight exudation of blood. One of the fingers even presented a kind of bloody pouch. The next day, from the umbilical cicatrix oozed a little blood; as this persisted, pledgets moistened with a solution of perchloride of iron at 33° were applied. The oozing continued the next day, in spite of careful plugging with the perchloride and well-applied bandages; and the child died of anæmia on the tenth day after its birth, the oozing have never ceased.

Georgetown (D. C.) *Medical College.*—The regular course of lectures commenced in this institution last week. Notwithstanding the unpromising condition of the times for all institutions of learning, the full corps of lecturers announced, indicates no lack of energy or encouragement in this department. In addition to the Professors so long and favorably known to the public, two new ones appear, Dr. S. L. Loomis in the chair of Chemistry, and Dr. Montgomery St. John in that of Anatomy.

The Queen of Madagascar died recently of cancer, which had reappeared after an operation three months previously.

Mr. Symes' New Book, Observations in Clinical Surgery, has just been published in Edinburgh.

The cattle disease is prevailing to a great extent in Russia. It is there called the Siberian epidemic. In four districts near St. Petersburg, as many as 4.400 horses, 800 cows, and 319 sheep, have died within the past two months.

Owing to the appointment of Dr. Jacobs, as Assistant Surgeon in the Army, the Howard Hospital will require a resident physician in his place. This will be found a good school for the young practitioner.

Vaccine Matter for the Army.—We reiterate the request for vaccine matter for use in the army. All medical men can understand how disastrous would be an epidemic of small pox in the camps, and the propriety of vaccinating all the soldiers. Vaccine matter is still needed, and should be directed to Surgeon General Smith, No. 1112 Walnut street, Philadelphia.

The Board of Health, of this city, was applied to for aid in obtaining virus, and, considering the fact that there are a number of prominent medical men in that body, it is remarkable that the request should have met with opposition.

Green Color without Poison.—Much has been recently said in relation to poisoning from wall paper and other materials in ordinary use when colored green by arsenical salts. The *Scientific American* says, that a green color not inferior to that made from poisonous arsenic is produced by melting 59 parts of tin with 100 parts of nitrate of soda in a crucible, and then dissolving it when cold in a solution of caustic alkali. The clear portion of this solution is then diluted with water, and a cold solution of sulphate of copper is added. A reddish-yellow precipitate now results, which, on being washed and dried, becomes a beautiful green.

"*Slink Veal.*"—In a new work on the Cow by Mr. Gamgee, speaking of the loss in slaughtering, the author says: "By pregnant cows the loss is very great. 300,000 out of 800,000 are slaughtered in this condition in France; and Charlier estimates the loss of forty-eight thousand pound sterling simply by the calf and its envelopes. It is disgusting to reflect that from the imperfect inspection of our slaughter houses calves that are found in cows are sold for human consumption. It is termed "slink veal."

Communications Received

Communications Received crowded out of the present number to make room for pressing matter

VITAL STATISTICS.

Of Philadelphia, for the week ending Oct. 26, 1861:

Deaths—Males, 127; females, 98; boys, 68; girls, 40—Total, 225. Adults, 108; children, 117. Under two years of age, 68. Natives, 162; Foreign, 40. People of color, 10.

Among the causes of death we notice—Apoplexy, 6; convulsions, 5; croup, 4; cholera infantum, 1; cholera morbus, 0; consumption, 40; diphtheria, 5; diarrhœa and dysentery, 6; dropsy of head, 6; debility, 19; scarlet fever, 9; typhus and typhoid fever, 9; inflammation of brain, 6; of bowels, 3; of lungs, 9; bronchitis, 0; congestion of brain, 3; of lungs, 2; erysipelas, 0; whooping cough, 0; marasmus, 15; small pox, 2.

For week ending October 27, 1860.....228
" " " 21, 1861.....233

Of New York, for the week ending Oct. 21, 1861:

Deaths—Males, 203; females, 183; boys, 120; girls, 108. Total, 386. Under two years, 169. Natives, 281; Foreign, 105.

Among the causes of death we notice—Apoplexy, 4; infantile convulsions, 29; croup, 5; diphtheria, 8; scarlet fever, 10; typhus and typhoid fevers, 3; cholera infantum, 22; cholera morbus, 0; consumption, 52; small pox, 8; dropsy of head, 21; infantile marasmus, 39; diarrhœa and dysentery, 17; inflammation of brain, 17; of bowels, 10; of lungs, 17; bronchitis, 1; congestion of brain, 7; of lungs, 4; erysipelas, 0; whooping cough, 1; measles, 4. 183 deaths occurred from acute disease, and 38 from violent causes.

Medical Directory.

Under this head we propose to give such information in regard to the Medical Colleges, Hospitals, and Societies of the City as we may be able.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr. J. F. Meigs.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesday's and Saturday's, at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery.—Clinical Lectures daily, (except Sunday,) from 2 to 4 P. M., by Dr. Goodwillie.

Wills Hospital for the Eye and Limb.—Clinics, Monday and Friday at 12 M., by T. G. Morton, M.D.

Howard Hospital, Lombard street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P. M. Monday and Thursday—Dr. Turnbull, at 1 P. M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P. M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1, and Dr. Morehouse, at 5 P. M. Thursday—Dr. Meigs, at 5 P. M. Wednesday and Friday—Dr. Atkinson, at half-past 3 P. M.

CONNECTICUT MUTUAL LIFE INSURANCE COMPANY.
HARTFORD, CONN.
Accumulated Capital over $4,000,000.
JAMES GOODWIN, President. G. R. PHELPS, Secretary.
OFFICE IN PHILADELPHIA: 404 WALNUT STREET.

This Company, incorporated in 1846, on a system entirely Mutual, furnishes Insurance to the policy holder at the Actual Cost. There is no Stock or Guaranty Fund to absorb the profits, but *all the profits* are *annually* credited to the policy holders, and may be appropriated to the payment of premiums after the first four years.

It offers *abundant* Security in an accumulated Fund, derived from premiums, amounting to more than

FOUR MILLIONS OF DOLLARS!

Its economy in the management of business have permitted dividends to policy holders, which have averaged 50 *per cent. per annum.* It has thus divided in profits among the insured nearly Two Millions of Dollars.

It is prompt in Payment of Losses. It has paid more than Two and a-half Millions of Dollars, for losses by death, and in no instance has payment been delayed beyond the time it was due.

It accommodates the insured on *Life* policies by receiving a note for *one-half* the premium when it amounts to fifty dollars or more, thus furnishing insurance for double the amount, for about the same *cash* payments as is required by most other companies, while the dividends are applied to cancel the notes. Parties, however, if they prefer, may pay all cash, in which case the dividend will be paid in cash.

Applications for Insurance received, and Pamphlets, and every information in regard to the business, furnished on application, by mail or otherwise, to

WADLEIGH & TILDEN, Agents,
404 WALNUT STREET,
Philadelphia.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 264. PHILADELPHIA, NOVEMBER 9, 1861. NEW SERIES, VOL. VII. NO. 6.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Water: its History, Characteristics, Hygienic, and Therapeutic Uses.

By Samuel W. Francis, A.M., M.D.,
Of New York.

(*Concluded from page* 99.)

INHABITANTS OF WATER.

This great (universe) the Ruler Soma has brought forth, when the Water's bosom as yet conceals the gods—
Benfey, Samaveda, 239.

When we take into consideration the vast extent of many oceans, the certain knowledge that a country is not able to sustain inhabitants if devoid of rivers or destitute of lakes; and that no region has, as yet, been visited by wandering man, whose bosom does not pulsate with the spring of life, the throbbing earnestness of innate health, the great importance of this broad expanse of latent wealth may be sufficiently appreciated and properly discussed. There are now, trusting to the mercy of the wind and wave, not less than two millions of sturdy seamen; or, by calculation, one sailor laboring for every five hundred who remain on land. This, however, does not include the hundreds of thousands who seek comfort, relaxation and a change of scene, in crossing watery abysses and enjoying placid lakes. Three hundred thousand mariners are the representatives of English customs, while an equally large amount perform the duties of American requirements.*

Though possibly there may exist a paucity of minds, as feeble as their numbers, that form conclusions relative to proper distribution and great changes in localities that would ameliorate the hygiene of depraved humanity, truly does a well read scholar† state that "the physical geography now claims that the particular arrangement of seas, continents, mountains, and rivers, which the earth has received, is the very best that could be given for the purpose to which the earth is destined. As the Divine wisdom is manifested in the order and adaptation of the parts of the human body, of animals, and of plants, so there is an object in the particular shape the continents have been made to assume. As we have our circulation of the blood, so there is the circulation of the earth's great heart of fire, the circulation of the waters, and the ventilation of the air." This is philosophically true and sympathetically correct:

Though the weight of the ocean:

"Boundless, shoreless, and sublime,
The emblem of eternity."

is variously determined, and L. M. Trask, of Connecticut, states that there is much more pressure near the bottom than the surface; causing the water to be much denser, the exact amount cannot properly be ascertained. By inductive reasoning and parallel conclusions, the pressure, at the depth of six miles, is stated to be seven thousand tons to the square inch, and, when within one hundred feet of the surface, some forty-three pounds. Now, as the atmospheric pressure is fifteen pounds; and it is positively known that a greater part of the fish, seined or otherwise caught, live within thirty feet of the top of the water, be it lake or ocean, sufficient data may be obtained for the purpose of assisting those desirous of investigating beds of rivers and the byways of certain tides.

The various methods employed for artificial respiration, under water, are eminently interesting and peculiarly singular.* The physiology of the process has been beautifully unfolded by Prof. Farady. And even as far back as the time of Aristotle, we find rude forms of temporary diving bells, used to facili-

* The whale fishery is followed by some 20,000 men.

† Prof Doremus.

* See suggestions of Dr. Halley on the art of living under water, published in the Phil. Transactions.

tate detention under water. This has been disputed by Beckman, himself excellent authority, who asserts that the first diving bell used in Europe was that of John Taisner,* 1664, Nuremburg. Lord Bacon made mention of certain processes of the kind,† and many others have pursued the subject, but like all flying machines, as yet, the *principle* has neither been discovered nor acted upon.

It has been the gradually accepted opinion of qualified travellers that water has been, for years, decreasing to a very serious extent. This fact is strongly endorsed by Dr. Livingstone, whose opportunities for observation have been only equalled by his powers of discrimination. Mr. Wilson maintains that portions of Australia, Africa, Mexico, and Peru, are being subjected to a gradual solidification of the aqueous‡ vapor which in time will render the localities unfit for the present race of human beings. As a seed for future meditation, this thought will bear analysis, and, ere long, demand investigation. Singular indeed is it that over one hundred years ago a similar view, slightly modified, was promulgated by John Ray, F. R. S.

Another fact, not generally understood by the star-gazers of modern inaptitude, is of itself a field for minute study and careful comparison, namely, the simple certitude that oceans make rivers—not that rivers form the mighty seas. The certain and astonishing truth alone, that for every fountain of water, pleasing cascade and meandering river, on earth, there is a representative in the clouds above, and§ "this river is drawn up out of the sea, more than a mile high; is always full of water, and is more than twenty-five thousand miles in length," will produce no little sensation in the breasts of those who readily comprehend and acknowledge what they never thought of when reflecting that the Mississippi and deep Amazon poured forth their contents into the purse-strings of receiving harbors. Again, as it ever must be, man is forced to bow before the universal agency of the great ruler of mechanical nature—The Sun!

If there exists anything like perpetual motion, it is the vast change of water in the circle of its duties; now a rivulet till borne forth to the swelling surge; now elevated to the brilliant clouds; once more returned to mother earth at the finale of its round. An article of a protracted length, might, with facility be penned, referring to the influence of rain,* its composition, the utility of falls of snow, and even what is owed by gentle flowers to the all-pervading dew. The present must, however, be employed concerning this most beautiful provision by stating, on the authority of science and statistics the amount of rain that falls in various countries. The remarks of Dr. James Hutton, 1787, commented on and exemplified by Sir John Leslie, regarding the fall of showers as occasioned by a sudden chilling of the air, though apparently childlike, when fully understood, were unknown two hundred years ago. As seen by some of the old theories, the principle of action was far from the correct idea now fixed as an undeviating law. Humboldt discovered that less rain fell as man approached the north.

The following is the table which seems, from the best researches, to be as comprehensive as it is significant. "The mean annual quantity of rain, and the number of rainy days in various parts of the world."

Eastern Hemisphere.

Between Lat. 45° and 50° N.	Depth of Rain. Inches.	No. of Rainy Days.
British Islands, - - -	32	156
Western France, - - -	25	152
Eastern France, - - -	22	147
Central and N. Germany, -	20	150
Hungary, - - - -	17	111
Eastern Russia, Kasan, - -	14	90
Siberia, Yakoutsk, - - -	?	60

Western Hemisphere.

Between Lat. 41° and 43° N.	Depth of Rain. Inches.
Cambridge, Mass., - - - - - - -	38
Western Reserve College, Ohio, - - - -	36
Fort Crawford, Wisconsin, - - - - -	30

Between Lat. 38° and 40° N.	Depth of Rain. Inches.
Philadelphia, Penn, and Lambertville. N. J., -	45
Marietta, Ohio, - - - - - - - -	41
St. Louis, Mo., - - - - - - - -	32†

The above statistics must prove of interest to those desirous of forming some estimate of the impartial beneficence of Divine plenitude.

* Schott's Technica Curiosa.

† Novum Organum lib. jj.

‡ "The General and Gradual Desiccation of the Earth and Atmosphere," by J. Spotswood Wilson.

§ Bibliotheca Sacra.

* Lord Bacon, though possessed of business duties, that, of necessity, required the closest study and the occupation of his very leisure, was so imbued with the fondest love of rural comfort and the choicest flowers that he has not inappropriately been styled, by Cowley, "Nature's Lord Chancellor." Not merely cognizant of all the latent beauties of suggestive exhalations and subdued harmonious melody; but even while the elements sweat drops of water, and the thunder groaned, he drove out bareheaded; and exclaimed with a poetic zeal, that "he felt the Spirit of the Universe upon him!"

† New American Cyclopædia: Ed. by G. Ripley and C. A. Dana.

But:

"O what an endless work have I in hand
To count the sea's abundant progeny!
Whose fruitful seed far passeth those on land,
And also those which won in th' azure sky.
For much more eath to tell the stars on high,
Albe they endless seem in estimation,
Than to recount the sea's posterity;
So fertile be the flouds in generation,
So huge their numbers, and so numberless their nation."*

It were useless to go into an elaborate account of the inhabitants of the mighty deep. Many of the remedies most efficacious and universally administered, together with a vast variety of luxurious comforts, come from the water-bed of earth!

As on land so on the sea, the nearer the naturalist approaches the tropics, the greater the variety of animals, the more numerous the race, and the more certain are they to be found in given latitudes. By a careful investigation, the result of many years of study and statistical reasoning, the following tabular account of the distributions of fishes has, at length, been formed:

SPECIES OF FISHES.

Locality.	Mollusca number.	Fishes number.
Mediterranean sea, - -	600	444
British sea, - - -	400	216
Scandinavian sea, - -	300	170

This, of itself, will serve to indicate the effect of a few degrees upon life, as modified by surrounding temperature and tidal influences.

Might we not fancy that the expressive feature of the ocean betrayed an innate consciousness of its great treasures.

"The innumerable smile."

"πουτίων τε Κυμάτων
ἀνήριθμον γέλασμα,"†

seems, with simplicity, to state that beneath

"The clear hyaline—the glassy sea,"‡

abundant representatives, created for most useful purposes, await the mandate of a higher power to contribute no small mite towards man's improvement, nay, pleasantest associations. Though Clawdius could call in $12,000,000 and Seneca philosophize while enjoying $17,500,000; though Lucullus expended at one gastronomic feast $100,000; and the lascivious *Cleopatrafied* Anthony drank off a pearl solution that was valued at $400,000; though Appius committed suicide because his fortune had decreased to $400,000, and Crœsus maintained that no man was wealthy who could not support an army at his own expense; though Esopus exhausted ingenuity and $400,000 to serve up but one rare dish, and Caligula strove hard to equal those who had set base examples of the kind, not one of them possessed the priceless comfort of sound knowledge, such as even those in this country at free academies enjoy, or school girls soon acquire by a few years study.

For the great sagacity of panthers that are able to count up as far as five, on their own claws, and thereby form a proper estimate of their respective strength, compared with man or other foe, we find a fish, beneath the water, that loads up, presents, takes aim, and fires off the contents of a gun with rarely failing accuracy. The flying fish returns, with ease, the feat of swimming birds, and the eel, the representative of snakes, with poisonous fangs on land, unfolds electrical phenomena most useful to the naturalist, and abundantly suggestive to the meditative student. Can we sufficiently enter into the deep happiness of Humboldt, and the zealous Bonpland, who passed hours in the closest study of this rare power of repelling foes.*

In proportion to the wonderful facility of birds, in elevating themselves, may we see in fish the swimming bladder that expells the air and aids descent. How beautiful the mechanism!

The lily of the valley is not more delicate in its simplicity of growth and systematic development than are the diminutive inhabitants of regions shut out from contaminating air, and known among the learned as marine algæ. While plants, on land, cannot live long without the aid of water's nourishment, sea-growths exist where land is not perceptible, and seem not, from their full size, to miss the kind assistance of accommodating land. For the sudden onset of the stealthy tiger and his lacerating claws, the sword-fish deals as dreadful wounds with equal power and forbidding energy. For the sheep, whose simple method of avoiding danger by the gentle and accommodating wool, the cuttle-fish surrounds itself with a mysterious cloud that may be entered, but the object is not touched. While reed-birds satisfy the epicure, a dish of white-bait cannot fail to call forth plaudits from the richest gourmet in the country. Can plover, or the much prized wood-cock call forth pleasanter emotions from

* Spenser.
† Prometheus Vinctus.
‡ Milton.

* To those enamored of this subject the philosophical experiments of Matteuci abound in wise axioms and sound deductions.

the healthy stomach than fresh salmon or the spotless turbot? The very fire-fly, whose golden head sails through the silent darkness with such eloquent suggestions of a fairy-land existence, and inspires thoughts as pure as innate innocence, cannot produce more lasting beauties than the phosphorescence of the scintillating water that receives, with sparkling ecstacy the sailing vessel, and glows with appreciative warmth at the approach of any messenger from man.

> Beyond the shadow of the ship,
> I watched the water-snakes:
> They moved in tracks of shining white,
> And when they reared, the elfin light
> Fell off in hoary flakes.*

The elephant, whose mammoth size astounds humanity at what rude creatures may produce, does not furnish with its ivory and other agencies, as many aids to usefulness as the sperm-oil, whale-bone, etc., from the monster of the deep. The delicacy of the graceful and most agile deer, or the swift-footed movements of the fond gazelle; the proud strut of the radiant peacock, with argus-eyed effulgence, do not awaken in the poet's heart emotions that can equal the soft dying beauties of the dolphin, whose rich exit from this world, like the rainbow's birth, is first—

> ——"A heavenly cameleon,
> Brought forth in purple, cradled in vermillion,
> Baptized in molten gold, and swathed in dun,
> Glittering like crescents o'er a Turk's pavilion."

Such scenes as this fill the imagination with the noblest thoughts:

> "Call spirits from the mighty deep,"

and harmonize with the excelling principles of purest intellects.

Is it nothing that men like Marsigli and Bonnet, Landsborough and Ellis,† Pallas and Linné, dedicate most precious years but to explain a coral reef, and carefully detect the erring writers who maintained the vegetable life of what is now acknowledged to be classed with little animals?

The account of J. D. Dana's expeditions, and its bearings on the coral reefs, awaken pleasurable views and genial cogitations:

> "We wandered where the dreamy palm
> Murmered above the sleeping wave;
> And through the waters clear and calm
> Looked down into the coral cave,
> Whose echoes never had been stirred
> By breath of man or song of bird."‡

Certainly one cannot but acknowledge that—

> ——"Life in rare and beautiful forms
> Is sparkling amid those bowers of stone."

For mercury, the master-spirit of a healing art, whose miracles surpass the records of all other remedies, extolled by Chisholm, praised by Ogden, Miller, Mitchell, Farriar, and Pearson, and in days, softened by the distance of receding time, abused by Zaccheus,* Acosta,† Hildanus,‡ and Ramazzani,¿ with hundreds more, we find at first in the "Kelp" birth, next more effectually obtained, that panacea for specific troubles, Iodine, in various forms. This great athlete is from the realms of Neptune. Who cannot bear strong testimony to the undeviating power of its tonic properties: its kind assistance in the "polite arts," and its all-pervading influence on those whose troubles are of long duration? Its name and nature are the same—in-violate.

Curtois and Brera—Guy Lussac and Davey, the indefatigable Magendie, and the thoroughly appreciated Manson, energetic Christison, and well-versed Lugol, reputable O'Shaugnessy, and learned Pereira; Coindet, of Geneva, and Thomson with Bayle, have passed years in the careful detection of its virtues, the innate qualities of its secret wealth.

As an equivalent for the many emetics now employed, the scilla maritima, or sea onion, is possessed of properties of the most inestimable value. Nor is it confined to this one specification of duty: as an expectorant it has few equals, on account of its direct stimulating action on the mucous membrane of the lungs;‖ and from the regions in which it is found, obedient to the provisional laws of nature, it may be obtained not only on the coasts of France, Spain, and Italy, but along the most of the far extending mediterranean shore. According to the matured judgments of Drs. Home and Blackall, squills, employed as a diuretic, stands forth pre-eminent and lasting.

The Japanese state that in the sea, which laves their islands, a large fish may be caught, the end of whose bony tail is an infallible cure for the deadly sting of a poisonous serpent.¶ Moreover, as an equal in characteristics to the

* Coleridge's *Ancient Mariner*.

† Essay toward a Natural History of the Corallines, and other like marine productions of the British Coasts. See, also, Johnston's British Zoöphytes.

‡ Thulia, J. C. Palmer, U. S. N. Expl. Exp.

* Paulus Zaccheus Dissert-Metallurg. Morbif. Rational Systemat., Vol. 2, Ed. 1729.

† Discourse on Quicksilver, of the Mynes and Worke, and what is required for that subject. Purchas his Pilgrimes.

‡ Observat et curat. Chirurg. cent. V.

¿ De Morbis Artific, p. 491.

‖ Any doubt as to this statement will be removed by a careful attention to the labors of Vogel.

¶ Golownin's Japan, Vol. III.

best remedy on land, the "Todo Nœvo," a small fish covered with hair, with four feet, like a hog's foot, is possessed of an oil, which is said to be a specific for ebriety.*

There are few subjects as interesting, in a scientific point of view, as that of the reproduction of oysters. The peculiar election of what seems, at first, to possess not even vegetable instinct and the vast importance of this delicious "bivalve" may be better comprehended by a conscientious perusal of the writings of M. Coste, and a study of the experiments made by Captain le Roy, at the head of the Bay of Poulmic.

In speaking of the curious fish, found in dark regions on this continent, a writer of immense originality and uutiring industry, makes use of the following remarks relative to their blindness: "The general law of absorption operates universally, without the aid of any specific stimulus; while it is clearly otherwise in respect to nutrition, and especially in regard to certain organs. The voluntary muscles become emaciated from want of the stimulus of exercise, &c. We see, therefore, how it happens that fishes with and without eyes may exist together in subterranean caverns as extensive as that of Kentucky; the latter inhabiting the dark regions, while the former exist in springs near the crevices of the cave."†

To form but a slight estimate of the impossibility of receiving into the minds' eye the gigantic scale of the plans of deified creations, of which

> "All are but parts of one stupendous whole
> Whose body nature is, and God the soul."‡

it cannot fail to be an interesting fact, stated on the sound authority of Professor Owen, that *in one drop of water five hundred millions* of beings, of the genus, *monas crepusculus* may be found! Who is there that can grapple with this limitless idea?

As an indication of the profound adoration of water in the ancient times, I quote the collocated result of an indefatigable scholar.§

"The Nile and Ganges have their sources in Heaven.[5] Plutarch calls the Nile the 'outflowing Osiris.' Osiris is the Sun. Osiris is the 'creative intellect,' called Amon.[7] Ossiris is the celestial Nile[8] Ap, the Sun, in Italy, Egypt, etc., is Ap, 'water,' in Sanscrit; Nero, Anar, is the Sun; Nereus, the old water-god. The waters of Heaven were diffused by the seven solar rays, and the seven rivers."

This one thought, carried on for numberless chapters, though unfolding the most curious and antique theories of a creator, would not conduce much for the present in bringing to a close the labors of modern metaphysicians. To descend once more to earthly details, we would suggest that leeches, besides being of great value in their special qualifications, as meteorological animals, are eminently important as a guide to knowledge. Though Dr. Vitet denies this statement with warmth and ability, there are others who maintain that excellent suggestions have been derived from the labors of this singular creation. In reading an account of the "Natural History of Man,"* one cannot help being struck by the singular fact that those nations, which live on the borders of oceans, seas, and lakes, possess more intelligence, and exhibit greater marks of industry than the races of men who inhabit inland regions. The thought is sufficient for suggestive analysis. Enough now has been said to point out some of the vast utilities of water in its various capacities. Thoughts, facts and singular phenomena have been laid bare to view, that some of the more salient points might be the better comprehended, and as faithfully appreciated by perusers, who require only an exotic germ to cultivate it in seclusion and attend to its revealings. One more characteristic may be brought before the ethical philosopher: it is in metaphor. Water, as a moral teacher to the thoughtful, I enter on the hinted subject with becoming brevity. Though adhesive and tenacious in its vast susceptibility to nearly all surrounding objects, yet cohesive in itself and equally united to the last. Though submissive to the power of heat, and subservient to the rapid changes of the influencing temperature, it has a limit, and then leaves the lucre-loving world to soar aloft, by that sure innate principle of an expansive purity, to gaze, with clouded aspect, on the earthly labors of abused creations. Though readily displaced, by its accommodating character, and yielding to the persuasive force by natural inducement, it can permeate, by pressure, even

* Koempfer's account abounds in curious anecdotes and superstitious traditions.

† The Institutes of Medicine by Martyn Paine, A. M., M. D., LL. D.

‡ Pope.

§ The Spirit History of Man—Cosmogony, by S. F. Dunlap. A work that requires a mind of the highest cultivation to comprehend its deep significance.

5. Wilson, Rigv. 1,248, 249; Duncker, ii. 370.

7. Kenrick, I, 303: Cory. 283.

8. Champollion, Egypte, 131.

* By James Cowles Prichard, M.D., F.R.S., M.R.I.A.: London, 1855.

the close-fitting pores of gold, and, with facility, support the largest platform ever based upon its well-known strength. While cheering on the quiet labors of the feeblest floweret, it can, with equal ease, shake man with a convulsive terror at its threatening water-spout. At the approach of winter it locks up canals, and covers earth with a most beauteous mantle, the best intervening agent against frost; again, as a return for seeming cold indifference to human wants, prepares a latent reservoir to cool the summer's draft.

Light troubles, like young pebbles, dropped into a murmuring stream, splash and make noise in sad proportion to its shallowness. The ripple reaches every side; and, as the rivulet flows on, continuous noise reminds one of the little obstacle. But the deep anguish of an injured nature, or the weight, resulting from a misplaced confidence, is more like the massive rock that tumbles from a lofty height, and causes one convulsive, thundering upheaving, while descending low. As deep the water, so the wound—and nought remains as evidence that still the same dead load lies hidden in the soul stirred element! While the chance observer can remove the pebble, traces even of the presence of this rock cannot be fathomed!

A death-bed scene, to him who suffers, is intensest anguish to an unprepared soul. The brain, however, gradually dulls, be-clouded by approaching dissolution; and all speculations are immediately lost in mazed conjectures. Though repentance comes and the heart yearns, the senses now refuse to work, and thought is vanquished by enfeebled intellect. Death by violence, of course, is sudden, and the sharpened faculties that still act on, are centred with a deadly hatred, on the face or purpose of the sinking man. Thoughts of future rise not up before the angered mind or frightened victim of displeasure; and a present state absorbs the all-remaining consciousness.

Death as a punishment, be it hanging, the sure guillotine or the protracted agonies of torture, by its own engrossing circumstances, causes the distressing moments to take years upon themselves, and thus exhaust imagination. Death by carbonic acid gas is only a sure muffled exit from receding ties. The affected brain is mystified by the slow, noxious fumes; the mind is rendered torpid, and intelligence is atrophied by chemical destruction. But, when a victim is now borne along the course to Charon's craft, through deep and stormy waters, or submerged beneath the quiet lake; be it the man of laden years or buoyant youth, be it the wily craftsman or the gentle spirit of a fragile female—the honored Christian or the tempting gamester, one and all are permanently stationed face to face, with actions of their own, and deeds that cannot be struck out! The still calm voice of conscience finds itself reflected in distorted truthfulness—the poisoned soul, at length freed from contaminated human ties, confronts the man of sin, now languishing beneath a ghostly, sickening despair. The last opportunities of doing good, and the safe chance of thus undoing evil, flit, with haggard eyes by the doomed spirit soon about to leave this earth, and meet above the judgment of undeviating rectitude. The injured friend now comes once more, with tenfold threatenings, to take from gasping death itself one ray of hope, and point with fearful meaning, to most exquisite revelings of a shameless conduct! Pure and undefiled religion not beheld for years, assumes a form no longer recognized beneath the garb of charity, but as witness in the final fiat; and light, and truth, and grace and love, while spreading shadows over those devoid of faith, come forth with radiant brilliancy to welcome innocence and pristine excellence, now washed forever clean in the pure fountain from the living Waters!

> "O Life! to Misery how drear,
> To Bliss how short dost thou appear!"

Case of Encephaloid Disease of the Kidney, Removal, &c.

By Charles L. Stoddard, M.D.,
East Troy, Wisconsin.

On the 4th of June last, I was invited to assist Dr. E. B. Wolcott, of Milwaukie, in the removal of a tumor from the abdomen of Mr. J., aged 58 years. On examination we found that the patient was a tall, anæmic looking man of a peculiar cast of countenance, indicative of of serious organic disease. He stated that he was of healthy parentage, and had good health until the appearance of the tumor six years before that time. The physician, in attendance stated, that from the first appearance of the disease, some irritation of the urinary organs had existed, but what the deposits were we were unable to learn, as no reliable chemi-

cal or microscopical evidence was presented. It was probable, however, from the statements made that an albuminous deposit was the principal one.

We found the tumor to be large, filling the right hypochondriac region, and pressing the abdominal parietes forward about two inches from their natural level. On palpation it was evident that it was semi-solid, having a pedicular attachment, apparently to one of the sulci of the liver, with a more extensive attachment to the posterior parietes.

Having no reliable data to form a diagnosis other than the present state, after duly considering the patient's anxiety, and his deprivation of general health, we concluded that an operation offered the only chance of ultimate recovery; at the same time we stated to the patient and his friends, that the operation was a serious one in his state of health. Our conclusion was, that we had here a cystic tumor of the liver, pressing on the kidney and producing irritation sufficient to account for the albuminous deposit. After the administration of chloroform, Dr. Wolcott proceeded to the removal of the tumor by making an incision diagonally across it down to the peritoneum, which we found to be very much thickened and slightly attached to it. He next made an incision into the tumor, which we found to be an encephaloid mass. He then proceeded to free it from its extensive posterior attachments, after which he found that the superior attachment was a very dense cord-like structure, about an inch in circumference, and apparently proceeding from the posterior part of the liver. Carefully tying the pedicle, he severed this connection with the knife and, after removing foreign matter carefully from the abdomen, brought the edges of the wound together with common sutures and adhesive strips, which was the only dressing used. After the patient was free from the effects of chloroform, morphia and camphor were administered in sufficient quantities to quiet irritation and produce sleep.

The tumor weighed about two and a half pounds, and on incising it freely, we found undoubted evidence of its being a kidney, from a small portion of its upper portion, which had not degenerated, showing the tubules and a portion of the pelvis of that.

The patient lived fifteen days after the operation, and died, apparently from exhaustion, caused by the great amount of suppuration which necessarily followed.

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

Doctor Daniel Ayres, President.

October 22d, 1861.

DEGENERATIVE OSTITIS, INVOLVING THE TARSO-METATARSAL ARTICULATION—EXTENSIVE RESECTION OF THESE BONES—SUBSEQUENT AMPUTATION OF THE LEG.

Dr. Daniel Ayres exhibited a portion of the leg and foot which he had removed from a gentleman, twenty-seven years of age, a merchant by profession, who came under his care in June last. He apparently possessed a good constitution, unimpaired by hereditary or acquired disease.

Four years previously he sprained his right ankle, but was not confined at home at that time by the accident, although the foot was a long time troublesome, and liable to become stiff and lame on rising, and attempting to stand or walk. These symptoms, however, usually subsided after exercise, but a slight permanent enlargement over the outer portion of the dorsum of the foot never disappeared.

About one year ago, in getting out of a railroad car, he again sprained the same foot very severely, and has remained thereby completely disabled, and a constant sufferer from pain.

This pain was at first confined to the plantar and internal surface of the foot, extending from the base of the great toe to the heel, and latterly shooting up the leg and thigh to the groin, where the superficial lymphatics were slightly swollen and tender. The character of the pain was deep, gnawing and constant; greatly increased by firm pressure over the plantar region, or any attempt to extend the arch of the foot. It was, moreover, greatly aggravated at night, and accompanied with reflex muscular contractions, so that he has not enjoyed a night's rest without anodynes, nor borne any weight upon the foot since the last accident, and now only moves about by the aid of crutches.

The muscles of the affected limb were atrophied and flabby; the veins dilated and varicose. The circumference of the right foot, over the dorsum, exceeded that of its fellow by one inch. Its cutaneous capillaries were notably increased in size, number and prominence, whilst the temperature was permanently elevated. No abscesses had ever formed, nor was there any fluctuation perceptible, and only slight œdema of the superficial connective tissue.

Since last January he has been subjected to a variety of treatment. At an early period, rest, and the occasional application of leeches, followed by repeated blisters over the dorsum pedis, and the internal use of iodide of potassium with narcotics, constituted the orthodox plan which was pursued for three months, but without benefit, beyond a transient mitigation of pain for a few hours. Under empyrical advice he permitted strong electrical currents to be passed through the limb twice a week, for nearly a month. At first, the pain was assuaged

for half a day, but even this effect soon ceased to be obtained. He then submitted to a more potential disciple of the same class, who fomented the foot with hot herbs for six weeks, and applied a series of caustic issues to the leg, but without better results. When convinced that he was steadily losing ground, he sought relief by a surgical operation, his aspect betraying the suffering and exhaustion of serious disease.

The diagnosis arrived at, after a careful examination, was, that the larger portion of the second row of metatarsal bones, together with the proximal extremities of the outer meta-tarsal, were so involved in disease, that amputation was justifiable and would, probably, be ultimately necessary. It was, however, determined to make an extraordinary operation, and, if possible, remove all diseased tissue, with a view to test the power of local reparation. This was carried into effect on the 3d of June, by an incision along the outer border of the foot, and another at right angles over the dorsum, which allowed the free application of the gouge and cutting forceps. So far as the osseous tissue was found softened, it was freely attacked, until, the heads of the three outer meta-tarsal, the entire cuboid, external and middle cuneiform, together with portions of the internal cuneiform, and scaphoid were removed. The remaining substance appeared firm and healthy, and no deposits of pus were encountered.

The free capillary hemorrhage was arrested by strong per sulph. of iron, sponge, compress, roller, cold and position. Decided mitigation of pain immediately followed the operation, comfortable rest being obtained by the moderate use of anodynes, and these were required but a few days. On the fifth day, the cavity suppurated, and the sponge was readily removed; after which, the wound was daily syringed with a solution of the permanganate of potassa, granulations springing up meanwhile, with marked rapidity. Several superficial cellular abscesses forming in the neighborhood readily healed after being opened. A leather splint upon the inside of the leg, prevented the anterior portion of the foot being drawn in the opposite direction: and the patient's general condition was promoted by tonics, and liberal diet.

Towards the latter part of July, everything seemed progressing in the most satisfactory manner, and he was sent into the country. There he continued until September free from pain, and gaining rapidly; all his wounds ceased to discharge, and, in fact, had cicatrized. Very soon afterwards, the sole and inner surface of the foot became puffy, red, and tender; and simultaneously the old pain was renewed. An incision gave vent to a very little healthy pus, and a considerable amount of semi-translucent, reddish, and soft material, resembling detached granulations. This affording no relief, he declined farther attempts to save the foot, demanding amputation, which was accordingly performed in the inferior third of the leg. An inspection of the parts removed, shows the space left by the resection perfectly closed by firm, fibrous material, and the ends of the metatarsus, replaced by new osseous tissue; whilst in the portions of bone left behind, and in the head of the astragalus, the degenerative process was rapidly advancing; and yet there was no suppuration, but the same soft, medullary tissue before described, occupied the whole plantar region.

Dr. Ayres observed, that the special interest of the case was, that it had agitated the merits of *resection*, as applied to this compound articulation; a question upon which unsettled views were entertained, and some confusion prevailed. This was in part attributable to the variety of elements entering into each individual case, but more especially to the undigested, imperfect, and therefore unreliable statistics hitherto accessible, upon the subject. The acknowledged difficulty, of estimating in advance, the *extent* of disease in any given case, was the great obstacle to an accurate appreciation of the sonditions under which conservative operations might be employed, with a prospect of success. There could be no question, that general experience would justly exclude from such efforts any case, where all or nearly all the tarsal bones were compromised by disease. With equal propriety, experience led us to anticipate good results, where only one or more of the first tarsal row were involved; for even entire sacrifice of the calcis, with portions of the astragalus, had repeatedly furnished good and serviceable results.

When, however, disease commenced in the second row, involving (as it was apt to do) the contiguous metatarsal, then, the propriety of resection over amputation in some of its forms, was constdered by many to be very questionable.

Bearing upon this point, it had been ascertained, that the isolated position of the bones, within these limits, and their intimate synovial connections, not only favored the diffusion of disease among them when unmolested; but that, where these synovial avenues had been necessarily opened in the removal of a portion of the bones, morbid action was wont to spread rapidly until all, in the second row at least, were destroyed.

In harmony with these facts, experience seemed to point out, that our best prospect of success had been sacrificed to ultra conservatism; and that in fine, nothing short of the entire removal of the second row, together with so much of the first, and metatarsal, as exhibited unsoundness, could furnish a reliable basis for the reparative process.

This proceeding was readily accomplished through a free incision on both sides of the foot, connected, if necessary, by one across the dorsum. The anterior portion of the foot required proper support during the process of healing. This having been satisfactorily accomplished, it became a pertinent inquiry, how far a foot thus mutilated, was capable of subserving the processes of locomotion. There was no apparent reason, why, it should not be superior to the stumps furnished by the operations of Syme and Pirogoff, without being subject to the criticisms brought against that of Chopart. It might be objected, that the original arched-conformation of the foot was thereby lost, but even with this drawback, the interesting observations recently published by Professor Szymanowski of Helsingfors,* encourage the conclusion, that such a limit cannot be equalled in utility, by any substitute of art.

*Archiv. für Clinische Chirurgie von B Langenbeek, Billroth & Gurtt. Berlin, 1861.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

QUININE AS A PROPHYLACTIC IN MALARIOUS DISEASES.

Whether quinine be, or be not, a prophylactic to intermittent fever, and probably to remittents, is now a very important question, as we have now several hundred thousand men, most of them unacclimated, about to march into a region where deadly miasms are more or less rife.

In the Chicago *Medical Journal*, for July, one of the editors expresses the opinion that it may be so for a time. He says: "The system rapidly becomes accustomed to quinine, as to other cerebro-spirants, and inordinate doses are readily borne and necessary after tolerance is once established by use." The objection he would make is, that "we should be despoiled by this practice of a valuable remedy." He basis his statement on "fifteen years of practice in a highly malarious western district." If this be true, it is certainly a serious objection. We will consider this further on. In the *Lancet and Observer*, for July, one of the editors says: "If there is one fact better proved than another, in regard to the action of medicines, it is that quinine is a prophylactic to intermittent fever, and all its dire sequelæ." . . . . "We believe that all troops, stationed or marching through malarious districts, should be compelled to take from four to six grains of quinine daily."

Dr. H. W. De Saussure, of South Carolina, published in the Charleston *Medical Journal and Review*, for July, 1860, a very able paper upon this subject. We shall quote largely, because of the importance of the general diffusion of the facts upon the subject. He says: "It is well known that during the years 1840–41, the English government sent an expedition into Africa, to explore the sources of the Niger river. The expedition consisted of two vessels, well manned, and fitted with all the appliances and comforts that skill could devise, for securing the health of the men about to undergo a prolonged stay in a region well known to be deadly to the white man, from the severity of its malarious diseases. The disastrous results of that expedition are well known. Of the two ship's crews, none escaped more or less severe attacks of fever; few returned alive to England; and the expedition was necessarily abandoned, after two years of struggle with the fearful endemics of the swamps of that deadly river.

More recently, in 1854–'55, the British Government determined to renew the effort to explore the Niger. They again sent two vessels, to remain in the river during two years. The results of the second expedition were very different from those of the first. Few of the officers or crew were attacked with fever, and in those attacked the disease was slight and easily controlled. The apparent cause of this striking difference in the health of the crews of the two expeditions, was believed to lie in the free and daily use of quinine by the officers and men of the expedition, from the time of entering the river until they left it. The quantity administered to each individual daily was five grains, which was required to be taken in the morning, before exposure on the decks of the vessel. Under this treatment it was found that no attacks of fever occurred during the time the vessels were in the river. As soon as the vessels left the river, which they were obliged to do by the annual fall of its waters, the quinine was discontinued. Some of the crew were then attacked with fever, which, however, speedily yielded to renewed doses of quinine, showing that its continued use during several months, had not destroyed the susceptibility of the system to its remedial action. In consequence of the occurrence of the cases of fever, the quinine was resumed as a daily allowance, and no other cases occurred. It was finally ascertained, as the result of several subsequent trips up the river, that it was necessary to continue the use of quinine for fifteen days after prolonged exposure to the malarious influences of the river, in order to ensure entire immunity from attacks of fever. It is, moreover, stated that during the time the quinine was being administered, the general health of the officers and men improved much, and their general aspect was that of men of robust health."

Here there is nothing said of increasing the dose. That quinine is a prophylactic is certainly proven. That it does not injure the health, and that it does not loose its prophylactic, or curative powers, by repetition, seems to be also proven. For, if by discontinuing the remedy, an attack occurred, the curative powers "were as marked, as if it had never been used."

Dr. De Saussure relates another case that involved still longer time. We quote:

"An overseer agreed to take charge of several rice plantations in one of the sickliest regions of rice culture, undertaking to spend the summer months on one of the plantations. He made no inquiry as to the health of the one chosen as his residence; it was selected from its convenient locality. When warned of the danger of his residing there in summer, he said he would never have the fever. His own con-

fidence in his capacity to resist malarious disease seemed unlimited. The result fully justified this confidence. He lived ten years or more in that neighborhood, spending every summer on the plantation, varied only by an occasional visit to the healthy pine land, where his family resided during the summer. He visited his rice fields without hesitation at any hour, day or night, that his business required. He never had an attack of fever during that time. I saw him after he had been there several years; a finer specimen of robust health it would have been difficult to find.

"It was ascertained, on inquiry, that it was his habit to take quinine daily, during the summer, before leaving his house; the quantity he did not know, for he never weighed it. He died finally of apoplexy, which any one who saw him would have predicted as the probable cause of his death. His entire and complete confidence in his ability to resist fever in so malarious a region, is strong evidence that he had been in the habit of using it, and was well satisfied of its prophylactic virtues. This case, in conjunction with the statements from the officers of the Niger expedition, would appear to prove that quinine may be used under exposure to malarious influences for an indefinite period, not only without compromising the general health of the individual or injuring the constitution, but as surely protecting the system from the inroads of malarious disease."

And we add without any stated necessity for increasing the dose, to maintain that curative action, which makes the remedy so valuable, or of keeping up its prophylactic powers. Dr. De Saussure's article, at this time, ought to have been republished entire. Our space, however, was quite too limited. We would like to make one other quotation, embracing a case, and the doctor's remarks upon the same.

"Two white men were employed, during the summer, in a malarious region, at the head of one of the rice rivers—the one to superintend plantation work, and the other to bring produce down the river on a coasting vessel. The latter was of course much exposed in his passage down the river in the midst of a rice growing region. He was urged to take quinine daily; he did so during the early part of the summer; but, judging his health perfectly good, and himself free from fever, he discontinued its use, considering it no longer necessary. He was soon afterwards—within fourteen days—attacked with a mild form of malarious fever, this attack was easily cured by quinine; he took it daily during the remainder of the summer, and escaped any further attacks of fever. The other man who was employed on the plantation, had lived all his life in a city; was entirely unaccustomed to malarious influences, and therefore, according to all our reasoning, a fit subject for a severe attack of the disease. His occupation, moreover, required him to be exposed late in the evening and very early in the morning, being frequently wet up to the waist from the dews, lying on the rank vegetation, through which he had to wade in passing to and from his business. During the early part of the summer he went to reside in an unhealthy pine land, occupied by some overseers with their families. Warned of the unhealthy nature of his daily occupation, and the risk incurred at summer residence, he took, daily, five grains of quinine before he went out of the house, and endeavored to persuade those around him to pursue the same course, which they refused to do, By August he was the only individual in the settlement who had not had an attack of fever. Satisfied of the immunity secured to him by the quinine, he determined to return and live on the plantation, as being nearer to his business. This he did in the latter part of August, and there he remained during the rest of the summer and fall, without suffering from fever. On the morning, in November, on which the first hard ice occurred, he discontinued the quinine, thinking it no longer necessary; ten days after, he had a pretty smart attack of remittent fever, which, however, yielded readily to a few large doses of quinine.

This case is one of great importance. A man accustomed to city life goes into a malarious region, resides among those who, from long habit were in a manner acclimated to its influence, and, as far as our experience teaches, less liable to its inroads, he alone, under the daily use of quinine, escapes the fever; all the others, including women and children, are more or less severely attacked. It serves further to confirm the experiences of the second Niger expedition. They found it necessary to continue the use of quinine for fifteen days after exposure to the sources of malaria. This man ceased its use the very first day he saw ice on the ground; in ten days he had an attack of fever. His entire exemption during the summer, almost certainly proves that had he continued his prophylactic doses a few days longer he would have entirely escaped. Another fact, illustrated by this case is, that the daily use of quinine *does not so habituate the constitution to its effects, as to deprive it of its remedial powers in the treatment of remittent fever.* This man was as easily cured by quinine as if he had never taken a dose of it before. It may also be stated that he went into the country in very feeble health; during the summer he became strong, robust, and perfectly healthy. In the same neighborhood in which this man lived, there came three men to reside with a view of collecting turpentine; they were advised to take quinine daily, as the region was a very unhealthy one. Two declared themselves accustomed to a malarious atmosphere, and declined to do so; the third consented, and used it daily during the summer. The three men lived in the same house, went to and returned from their occupations together, and were in all respects similarly situated. The man who used quinine daily was perfectly well during the

whole summer; the others who did not, had very severe attacks of fever."

In reports from recent African expeditions, the following items occur in the *Lancet* for December 1858.

"The last accounts of Dr. Livingstone are more cheerful; the general health of the party was good; a free daily use of quinine having warded off the pernicious fevers of the country."

In a still later number, the following:

"Accounts have been received from both of the African expeditions—the health of Dr. Livingstone's party continued good; Dr. Barth's had suffered severely from fevers of the climate. This difference is attributed to the free and daily use of quinine, by the former, with which they were liberally supplied."

Since writing the above, we notice that the *American Medical Times*, for October 19th, mentions the fact that the Army Sanitary Commission have issued a circular upon this subject, drawn up by Dr. Wm. H. Van Buren, of New York, in which many facts like the above are given. We have not seen this circular, and had we known the fact before, perhaps this article would have been curtailed somewhat. We however believe, our readers, as well as army surgeons, should be acquainted with the above facts.

The editor of the *American Medical Times*, after acknowledging the fact in regard to the prophylactic powers of quinine as above, makes the following very appropriate remarks:

"The importance of this circular at this critical period in the history of our volunteer army can scarcely be over-estimated. The great majority of the surgeons of these forces have been little accustomed to the treatment of malarious diseases. The season has arrived when the progress of the war is to transfer large bodies of troops directly into regions where malaria exists now in the most concentrated form. Unless some prophylactic is employed, these malarious fevers will decimate our army in six months, and render it impotent against an acclimated foe. Happily it is in our power to shield those who go bravely forth to meet the exigencies of war, from one of those consuming forces which threaten the Northern soldier in his progress southward, viz, malarious diseases."

We here conclude the subject, though much more could be said, and promise our readers a greater variety next week.

—o—

ON PUS-CELLS IN THE AIR AND THE AEROSCOPE.

During an epidemic of purulent ophthalmia, which occurred at the Foundling Hospital, near Prague, Dr. Eiselt had the opportunity of proving in his own person that infection may take place in other ways than by contact. As the attending physician, he took every precaution to protect his own eyes from any contact with the matter proceeding from the children, which it was easy for him to do, inasmuch as the syringing and cleansing of their eyes was performed by the sisters of the establishment. Still, being engaged in the hospital for several hours daily, he perceived smarting and heaviness of the eyes, followed afterwards by reddening of the conjunctiva, with an œdematous state of the portion lining the eyelids, and a considerable secretion therefrom. The same symptoms were observed in all persons who had care of the children. Some of the nurses became seriously affected from getting matter in the eyes, and others they knew not how. The inconvenience, as regards the author, was checked by the use of weak stimulant collyria.

He asks, How comes it that acute purulent ophthalmia may thus be excited without any contact, in the common sense of the word? and refers, in explanation, to Pouchet's recent experiments with the aëroscope as described in the *Comtes-Rendus* for 1860. Professor Purkinje constructed a similar instrument for his use. Its principle consists in forcing a determinate quantity of the air to be examined over a glass-plate smeared with glycerine, which detains the particles of dust and microscopic structures for examination. By means of this instrument, (for details of the structure of which we must refer to the paper,) the air was examined which existed in a ward containing thirty-three children suffering from acute purulent ophthalmia, accompanied by abundant secretion. Pus corpuscles were at once detected in the portion of air examined; and this fact the author considers supplies the rational explanation of the propagation of the disease without apparent contact with the secretion from the eyes.—*Wochenblatt, No.* 13.

APPLICATIONS IN ECCHYMOSIS OF THE EYELIDS AND CONJUNCTIVA AND CILIARY BLEPHARITIS.

M. Déval, in ecchymosis of the eyelids, causes this solution to be applied several times daily:—Water, 125, chlorhydrate of ammonia, 2, and tincture of arnica, 4 parts. In subconjunctival ecchymosis he directs a mixture composed of tincture of arnica 2 parts, chlorhydrate of ammonia ½ to 1 part, water 60 parts, to be applied externally to the eye and dropped into it. In ciliary blepharitis the crust must first be removed by small cataplasms, or tepid decoction of mallow, and then the following ointment should be freely rubbed, for from three to five minutes every evening, into the free edge of the eyelid: Red oxide of mercury, acetate of lead, of each 6 grains, camphor, 3 grains, fresh butter, 1½ drachms.—*Bullet. de Thérap.*, vol. lx. p. 268.

TREATMENT OF HÆMORRHOIDS.

M. Herpin strongly recommends the following ointment for non-bleeding hæmorrhoids, as

facilitating the reduction, retention, and resolution of the piles. It is composed of from 1 to 3 parts of tannin to 15 of cold cream. When the stools are difficult and the hæmorrhoids much developed or multiplied, only one part of the tannin should be used, and if much irritation is produced, a still smaller proportion. After smearing the tumors with this ointment they should be immediately returned. Very shortly afterwards we may observe a constriction of the anus and a dryness of the mucous membrane impeding a re-issue of the piles. The patient must rest, sitting or lying down, for a short time after the reduction. A necessary condition of the cure is to return the tumors with the aid of the ointment *immediately* after their prolapse; and this means must be continued, notwithstanding the diminution of the size of the piles, until they return of themselves after evacuations, and do not come down in the intervals. The constipation which favors their continuance must be treated by all means which relieve dyspepsia, and by the use of fruits. Of habitual purgatives Dr. Herpin has no great opinion, but of this class of medicines he gives the decided preference to the following:—Washed flowers of sulphur, calcined magnesia, and sugar of milk, equal parts. A teaspoonful, more or less heaped up, is to be taken daily (so as to get one or two stools), or every other day, for a week. *Ibid*, vol. lx. p. 395.

THE BLIND AND THE DEAF AND DUMB.

A general report on the deaf and dumb, the blind, and the institutions for their education which exist in France, has recently been sent in to the Minister of the Interior by the Baron de Watteville, the general superintendent of the benevolent institutions of France. There are now in the 89 departments of the Empire, 21,576 deaf and dumb, amongst which 12,325 are males, and 9,251 females. The largest average number is found in mountainous regions, as in the high Alps there is one deaf and dumb person in 419, while in Paris there is only one amongst 4.694 inhabitants. There are 47 institutions for the education of the deaf and dumb, of which the two largest are administered by the State. The blind are more numerous than the deaf and dumb, as the last census puts their number at 30,214, amongst which are 6,469 males, and 18,745 females. The average number for the whole of France is 1 in 1,200 inhabitants. The largest institute for the education of the blind is that in Paris, which was founded in 1784.

RUPTURE OF THE KIDNEY BY RUNNING OVER.

A child, aged four and a half years, was run over by a cart, and died twelve hours after. Externally there was no mark of injury, except a broad suggilation of the right thigh, evidently due to the wheel. The abdomen, however, was tensely distended, and on opening it much fluid and coagulated blood was found therein. The right kidney was enveloped in a coagulum, and was found to be transversely ruptured, the organ being completely divided into two parts. This case is highly interesting in a juridical point of view, as so great is its rarity that Casper has not met with a similar instance, and the remarkable fact of the injury being unattended by external injury.—*Berlin Medical Zeitung*, No. xxvi.

LEUCORRHŒA AND ULCERATION OF THE CERVIX UTERI IN PREGNANCY.

In order to test the accuracy of M. Cazeaux's assertions that ulcerations of the cervix uteri are met with in seven-eighths of pregnant women, M. Charrier instituted a careful examination of one hundred indiscriminately as they offered themselves to his notice. The following are the conclusions of the memoir he has compiled on the subject:—1. Leucorrhœa precedes and gives rise to ulceration of the cervix. 2. The congested conditions and processes of hypertrophy taking place in the pelvic organs are the causes of this leucorrhœa. 3. At first a physiological condition, it may become morbid under the influence of a bad state of health. 4. Nearly two-thirds (72 per 100) of pregnant women have leucorrhœa. 5. Nearly eight-tenths (56 of 72) of these subjects in leucorrhœa have ulcers of the cervix. 6. Of the 56 women, 41 were multiparæ. 7. For the treatment we should confine our attention to the general condition, giving mild aperients and preparations of iron and remedying disorders of the digestive organs. Local treatment would frequently induce abortion.—*Bull. de Therap.*, vol. lx., p. 69.

ON THE COMPARATIVE INCREASE OF THE TWO EXTREMITIES OF THE LONG BONES.

As the result of experiments upon animals, M. Ollier comes to the conclusion that the humerus increases more by its upper than by its lower extremity, while the radius and ulna increase most by their lower extremities. In the lower limbs the relations are the reverse of this, for the lower extremity of the femur increases more than the upper, the reverse of this being the case with the tibia. These results are of some consequence as regards resection and amputation in young subjects. Thus resection of the articular extremities at the elbow does not induce a very considerable arrest of development, since it is at their opposite extremity that the bones which constitute the

joint chiefly increase. In the knee such arrest is much more to be feared, as it is at the ends forming the articulation that the tibia and femur most increase. For the same reason, and the proportion taken into account, excision of the shoulder exposes to more shortening than that of the hip, and excision of the wrist more than that of the ankle.—*Comptes-Rendus, Med. Gazette.*

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, NOVEMBER 9, 1861.

A NEW ERA IN MEDICAL EDUCATION.

Despite the vigor and earnestness with which the importance of thorough preliminary education of the student in medicine has been urged, but little progress has been made. The more prominent schools of medicine have lengthened the term of their lectures, added to their teachings the facilities of clinical instruction and have made their requisites for graduation more stringent. Grave doctors, assembled in council to consider the interests of the profession, have unanimously resolved that the standard of medical education ought to be raised; and have gravely recommend to the medical schools to take action in the matter, and require a higher grade of qualification in those who sought the honors of the profession in their walls. Still it remains a notorious, yet a lamentable fact, that men, ignorant, not perhaps of minute anatomy, or physiology, or therapeutics, but of the fundamental branches of a general education, such as are essential to the position the physician ought to occupy in society, are every year permitted to enter the ranks of the profession from all our medical schools. To some extent, the evils of ignorance in medical literature are remedied. It is more difficult for the ignoramus to slide through all the forms of graduation without being discovered and exposed. But the great deficiency is found to lie still farther back. The farmer may drop his plow, the mechanic his plane, the shoemaker his awl, or the tinker his solder, put on his standing dickey, and enter the office of the family physician to commence his three years study. Some think an inkling of Latin is necessary to qualify the student to understand the names that distinguish the different organs of the body, but he soon learns from his preceptor the locality of the astragalus, the ulna, femur, and os frontis, and in a little time comes to talk learnedly of pneumonia, hydrocephalus, meningitis, tuberculosis, etc., without sacrificing time to acquire such knowledge. Others are impressed with the importance to the student of a knowledge of the branches of a common education, but if he be naturally shrewd, learn his lesson easy and well, and is determined to study medicine—*to be a doctor*—it won't do to repress the aspirations of the rising genius and so he passes on to the lecture room. And here, so that he present a thesis "of his own composition, correctly written, and in his own hand writing," with no bad spelling, or evidence (in itself we presume) of want of literary culture," and make no serious mistakes in his examination, which we will suppose to be very thorough, his ignorance of the fundamental elements of a good English education, will form no bar to his receiving the highest honors of the college; he will be sent forth with a diploma entitling him to rank and honor among the best and most learned of the profession. The evil to be remedied here, if evil it may be called, is not in the college, which has done its best to instruct him in all the branches of a medical education, and by whose instructions he has wisely profited, so much as it is in the physician, himself perhaps, ambitious to become a teacher, who permits a young man, confessedly an ignoramus in all that constitutes education in other branches, to enter thus unprepared upon the study of the healing art. Here arises the evil which clings to the student like an incubus, it may be in all after life, or which fits him only to become the rough, illiterate practitioner. And it is just here that the medical profession and schools of England now interpose their strong arm to arrest the ignorant, even at the very threshold of his professional aspirations, and require "that all students pass an examination in general education before they commence their professional studies." "This scheme, says Dr. Donkin, enjoins *first*, that every student commencing his medical studies from this day henceforth, must be registered under the provisions of this act. But to enjoy this privilege he must produce evidence of

having passed an examination in the arts before one of the examining bodies prescribed by the act. *Secondly*, that he shall commence and pursue his strictly professional studies for a period of four years after his examination in general education." This rule went into operation on the first of October ult., and the result of it was "a diminution of the number of students at the several schools," and the further result of it will be to induce those who desire the honors of our noble profession to become men; scholars, as well in literature as in medicine. The *Lancet* well characterizes the movement as "a new era in medical education," as "the first occasion on which an attempt has been made upon a large scale to bring the profession of medicine into closer alliance with literature, to make it in fact a *learned* profession." For a time no doubt the number of students will be greatly diminished, but the necessity of acquiring a thorough preliminary education before being registered as a student of medicine, will fit him better for the investigation of medical science, and enable him more intelligently to apply his knowledge in practical life. And such, also, would be the effect of the adoption of such a regulation in this country. The matriculants at our medical colleges would be greatly lessened, no doubt, but a high standard of professional proficiency would be disseminated through all the land, and the well educated physician would take the position in social life, for which such attainments would eminently qualify him. The profession of medicine would be indeed a *learned profession* and the physician received as a man of *science* as well as practical ability.

Is it objected that we have no central authority from which such an enactment could emanate, and which could enforce its authority? True we have none. Nor do we need it. The concentrated force of an enlightened public opinion among medical men in every portion of our country, aided by the action of our medical associations in every locality, would accomplish the object desired, quite as effectually as any enactment of a legislative body. If no physician would receive under his instruction a student who has not a thorough preliminary education, would it not effectually bar against him the door of legitimate medicine? Most assuredly. And the reform thus practically initiated would soon exhibit its desired results in bringing those only into the profession who are men of intelligence as well as science.

THE PROSPECTIVE FAILURE OF CINCHONA—ITS SUBSTITUTES.

There is something significant in the urgent efforts now being made to revive the use and test the virtues of arsenic in malarial fevers. For the past twenty years its febrifuge properties have been successfully tested, on an extensive scale in Bombay, and other parts of India, by the English army surgeons. And by these experiments, the fact has been established, that arsenic may be taken in large doses by patients of all ages and every race and constitution, with the happiest results in most cases of malarious fever. It has been given in doses of a grain or a grain and a half during the six hours preceeding a paroxysm, and it is affirmed that the failures in its use occurred most frequently when it was given most timidly. In some portions of England it is taken by the poor people, under the name of the "tasteless ague drop," and sometimes confirms a cure which quinine has left imperfect. Its abundance and compartive cheapness tends strongly to promote its use. The important objection to its administration, as an antiperiodic, is the risk of irritation of the stomach and bowels it produces when taken in over doses; but even this effect is diminished by the skillful combination of aromatics. The efforts to bring it into general use, will no doubt, also suggest a method in which it may be administered without incurring the risk mentioned. That arsenic has antiperiodic properties there is no doubt. The experiments of eminent therapeutists leave no room for question on that point. That it is as certain and as safe a remedy as quinine, or equal to it in virtue, no one, so far as our knowledge extends, asserts. Neither does any one anticipate that arsenic will ever supersede quinine. It is the impending scarcity of the latter, its large consumption, and the enormous

price required for it, that has led to the trial of arsenic, and other articles, as a substitute for it.

The event is not an impossible one that the supply of quinine may be exhausted. It is already, to some extent, limited. The district in which the most valuable species of cinchona (*cinchona calisaya*) grows, is an extensive one, but not indefinite. It is on the eastern slope of the Andes, from 19° south to 11° north latitude, though the forests of Bolivia and Caravaya, in Peru, are only the homes of the yellow variety, most used. The value of the bark stimulates, not to its cultivation, but to its destruction. Dr. Weddell says, of Bolivia, "where formerly one met with them (the cinchona) every where in the vicinity of villages, now to find a tree of a few decimétres in diameter, it is necessary to make a journey of several days duration into the bosom of the forests." Mr. Markham says during frequent journeys through various parts of the forests of Caravaya, he never met with an old tree, though young plants and roots of the calisaya abounded. Mr. Spence says that in the cinchona forests of Ecuador there does not remain a single plant large enough to produce seeds. The people of Chimboraro, we are told, on the other hand, are in the habit of breaking off young branches and sticking them into the ground, as if making provision for a new crop to supply the loss of the old. The attention of the British Government has also been directed to this subject for some years past, and the task, no easy one, of procuring from the cinchona regions, plants with which to form the nucleus of a cinchona forest, was assigned to Mr. Markham, and as the result of his labors 2,114 plants of the several varieties of this tree are now growing on the Neilgherry Hills, in India, in a wooded ravine near the Government Gardens, at Ootacamund. The plants generally, it is said, are in a very healthy and promising condition, some of them beginning to form branches.

And if we consider again the enormous demand there is for quinine, the same fact will also appear. The government of India alone expends fifty thousand pounds a year for it. How wide and extensive is its use as a specific in fevers, especially of malarious origin. And in fevers of other types, its use is also becoming more and more extensive, whilst as a prophylactic it is in the pockets of almost all travelers in malarial regions, and in the camps of many soldiers. This enlarged and constantly increasing demand not only exhausts the supply, but raises its value in market, so that almost fabulous prices are required and obtained for it, and in some localities it can hardly be purchased at any price.

These facts then show that the time may not be far distant, when the original sources from whence the supply of the best qualities of cinchona comes, will be exhausted. The efforts, therefore, to transplant it to other soils, and to cultivate its growth, should be carefully encouraged. England has taken the lead in this matter, and through her instrumentality the calamity to all civilized nations, and especially to our own—the failure of quinine—may be averted.

EDITORIAL NOTES AND COMMENTS.

Scarlatina by Mail.—The *Medical Times and Gazette* publishes the following case over the signature of James C. L. Carson, M.D., of Coleraine, Ireland. Miss M. A. K., whilst in a state of perfect health recived a letter by post from a friend in Dublin, conveying the intelligence that one of his children had just died of scarlatina maligna. The young lady carried the letter about with her and was very greatly affected. Next day she was ill, towards evening an eruption appeared on her face, and next morning she was completely covered with scarlatina eruption. She had the characteristic sore throat, and went through all the stages of the disease, even to desquamation of the cuticle. Her recovery was extremely doubtful for two days. There had not been a case of scarlatina in Colerain for months, and this was the only one for a long period. The facts he adds are all indisputable. This, like the case mentioned in the Reporter for Oct. 26, was, no doubt, cne of those sporadic cases which occasionally occur in almost every physician's practice. To account for their precise origin is a difficult matter, and yet that they are true cases of the disease is beyond a question. The idea of the

common people is that the disease is "sent," "goes in the air," which is quite as definite a solution of the doubtful origin as the verdict of the coroner's jury, "died by visitation of God." The idea of the contagion of scarlatina being conveyed by mail, and *immediately* affecting the recipient of the letter, is *prima facie* absurd and preposterous.

Sanitary Report.—Dr. W. J. H. Douglass, Associate Secretary of the Sanitary Committee makes an interesting report of the condition of the division under Generals Dix and Banks during the month of September, a brief abstract of which is here presented.

The camps are located generally upon hill-tops or hill-sides; two camps however, for military reasons, were placed upon a plain, and upon a clayey soil. Two-thirds of the regiments are supplied with one blanket to each man, but no winter clothing had yet been given out. Water is obtained most generally from good springs or from running streams. In the preparation of food there is a great improvement. The rations are more than enough. Fresh meat is supplied generally three times a week to all; potatoes occasionally, and desiccated vegetables a few times. In a few regiments, systematic arrangements have been made by which they are supplied daily with full rations of soft bread, and by another month every regiment will have the facilities for converting its flour into bread within its own camp. The men are in good spirits, singing and dancing constituting their chief recreation, and are rapidly improving in discipline. Fifteen regiments have been systematically vaccinated. Five surgeons have made requisitions for vaccine virus for their regiments, but have not received a supply. The surgeons are generally men of experience, and have passed a medical examination. Camp hospitals have been organized in all the regiments, and are generally well supplied with requisite instruments and necessary medicines. The deficiencies are in hospital furniture, such as beds, sheets, blankets, shirts, drawers, stockings, etc. A brigade hospital is in process of construction in Poolesville, under the management of Dr. A. B. Crosby. The diseases prevailing are the different forms of fever—typhoid, remittent and intermittent. Measles had mostly disappeared. Pneumonia began to appear, and acute rheumatism had increased in frequency. The mortality has been slight. Some regiments have lost some by disease. In one, a prophylactic for malaria has been used. (First Minnesota.) Quinine bitters were furnished to the surgeon of this regiment by the Commission, and he reports in general terms most favorably as to its effects. The region of country occupied by this regiment is low and wet, and subject to malarial fevers. A fair test of the prophylactic powers of quinine may therefore be made, and the results made known to the profession.

The Arctic Expedition.—The return of the Arctic expedition has already been announced, and the official account of the voyage, with some of the details and results, has been published. The expedition sailed from Boston, July 5th, 1860, and has therefore been absent little more than one year. On the 16th of August, 1860, they were at Upernavik; on the 21st at Tesswissak; on the 23d entered Melville Bay. At Cape York they found Dr. Kane's runaway boy, Hans, and took him, with his wife and child, on board. On the 27th they entered Smith's strait, and were met by a heavy pack, through which no practicable lead could be distinguished. Here they also encountered a heavy gale, which lasted several days, and obliged them to seek shelter behind Cape Alexander, September 2 they reached Littleton Island, and in the attempt to work up the Cape Hatherton, encountered a severe "nip," which injured the vessel so materially as to compel them to run down into Hartstein bay and anchor. On the 9th, they went into winter quarters in a bight at the head of the bay. The temperature had fallen to eighteen degrees below zero. Thick snow had been falling at intervals since August 25th. There stores were deposited in a house, built for the purpose, on the shore; the hold of the vessel was converted into a comfortable room for the men, and the upper deck was housed in with boards. This was in latitude 78° 17′ 4″ N., longitude 72° 30′ 57″ W., twenty miles further south than Dr. Kane's winter quarters. A survey of the harbor and the adjacent coasts was made; the fine pendulum apparatus constructed for the expedition was put up, and a full set of satisfactory experiments were obtained; the magnetic instruments were also placed in the observatory, and observations noted, a meteorological observatory was erected on shore, and records made from it three times a day. A re-survey of St. John's glacier, (so named by Dr. Kane) was also made. In October Dr.

Hayes ascended to the *mer de glace* and traveled eastward fifty miles. His greatest elevation was 4,500 feet, at which point the temperature was fifteen degrees lower than at the level of the sea. On the 22d of December, Mr. Sontag started on an expedition to open communication with the Esquimaux for the purpose of obtaining dogs, which resulted in his death from cold, having broken through the ice. Late in March Dr. Hayes made a preliminary journey to Fog Harbor, and visited Dr. Kane's winter quarters. During this journey the coldest temperatures of the cruise were recorded, one day 66½, another 68; their encampments were the snow huts of the Esquimaux. On the 4th of April, he started on an expedition, with sledges and dogs, to extend his observations still farther north, but meeting with hummocked ice of extraordinary thickness, through which he had to cut his passage, he only reached a latitude of 81° 35′ on the 18th of May, when his provisions being exhausted, he was compelled to return. This high latitude has been exceeded or equaled by no explorer, save Sir Edward Parry. The land was taken possession of by the usual forms, in the name of the United States, and the flag, used upon the occasion, has floated over the most northern known land on the globe. He reached his vessel on the 27th of May, and on the 14th of July put to sea, reaching Halifax on the 8th of October.

Thus another of the numerous and hazardous expeditions, to explore the regions of snow and ice in the Arctic regions, has returned, and the great problem of the "open sea" is yet unsolved, the mystery of the supposed "northwest passage" is yet unfathomed; bound up in the icy chains which the hand of man may never break. Yet, no doubt, invaluable additions to the different departments of physical and natural science have been made by Dr. Hayes. His field of research was new and more limited than he anticipated, but he has, no doubt, explored it faithfully, and in due time his researches will be given to the world.

Medical Colleges of New York.—The introductory address before the *College of Physicians and Surgeons* was delivered by Prof. T. M. Markoe. Subject—*The scientific gratifications which the practice of the profession holds out as a reward to its votaries.* In picturing the professional future of those who listened to him, he wished it to be understood that its rewards could only be realized by a diligent, unwavering, and self-sacrificing devotion to science, and their experience would always verify the truth of the motto, "*Palma non sine pulvere.*"

Prof. C. A. Budd delivered the introductory lecture before the New York *Medical College and Charity Hospital*, in which he alluded to the facilities which New York offers as a centre of medical education, and the school in particular with which he was connected; it having added the two chairs of infantile pathology and ophthalmic surgery, wanting in other schools; separated the chairs of obstetric medicine and surgery, and first exemplified in this city, the direct connection of Hospital and College.

The Address before the University Medical College was delivered by Prof. J. T. Metcalfe, in which he also pointed out the immense advantages which New York possessed for the didactic and clinical study of medicine. In her public hospitals there were constantly three thousand patients requiring medical and surgical aid, to the bedside of whom the student was always welcomed by the attending physician. Every facility was offered for this advancement, and diligent application was all that was necessary to make him an accomplished and successful practitioner.

Before the College of Pharmacy, Prof. J. M. Maisch, of this city, delivered his inaugural and the introductory. He considered the rank which pharmacy holds among the sciences. It combines science and trade in the daily duties of a single profession; it is closely allied to the healing art, not as the prescriber, but as the dispenser of remedies. He referred also to the practical duties of the Pharmaceutist, and reviewed the history of chemistry and pharmacy, which he said have been from time immemorial so nearly allied to each other, that they might be regarded as two foster sisters, reared by one common parent, medicine. Botany was also mentioned as an important collateral branch of pharmacy, and the student advised to cultivate it as the source of numbers of useful remedies.

Important.—We learn from the *Newark, N. J. Mercury*, that Mr. John J. Craven, of Newark, who was appointed Surgeon of one of the New Jersey Regiments, and against whose appointment the "District Medical Society for the County of Essex, N. J.," protested in a letter to the Surgeon-General of the U. S. A., (given in the Reporter for Sept. 28,) accompanies the

Naval Expedition, attached to the staff of Gen. Wright's (Third) Brigade. From the same source, it appears that the Secretary of War, to whom a letter was recently addressed by some of the physicians at Newark, protesting against Mr. Craven's promotion, has sent a reply "commending him as having shown the highest degree of fitness for his position, and intimating that the opposition he has received, proceeded entirely from feelings of jealousy, rather than from a patriotic regard for the interests of the service."

We give the above statement as an item of importance to the profession generally.

Adulterations of Mustard.—In the *Lancet* for Oct. 26, we find the result of the analysis of thirty-three samples of mustard. Of these samples, *twenty-nine* were found adulterated with turmeric powder, wheat flour, and in one instance plaster of Paris. Only four were genuine, consisting wholly of the flour of mustard. These adulterations are more an imposition upon the purchaser than decidedly injurious. In our own country, we imagine, a like analysis would show a like disproportion between the pure and the impure article, though the adulteration would be oftener found to be corn meal and cayenne pepper, the latter to impart the strength which housewives so frequently complain of as wanting.

Vaccine Matter for the Army.—A member of the Board of Health of this city, desires us to notice the following statement relative to the action of that Board upon the subject of vaccine matter for the army. He says:

"Application was made to the Board by Surgeon-General Smith, in June last, for vaccine matter for the use of the Pennsylvania troops encamped throughout the State. As the ordinance confers no power upon the Board to demand from the vaccine physicians a supply of virus, except for the use of the physicians in the city, the Board were unable to make an *official* requisition on them. But they unanimously resolved, that the vaccine physicians be recommended to furnish gratuitously, as far as was in their power, vaccine virus for distribution among the staff of the army in Penn'a. The Clerk of the Board addressed a note containing a copy of the resolution to each of the twenty-four physicians, requesting them to forward to the Health Office as many vaccine crusts as they could spare for the above object. To this application there was immediately a generous and loyal response. The amount thus collected, quite a large supply, was handed over to Dr. Smith, with which, together with matter elsewhere obtained, he was enabled to have vaccinated about 11,000 soldiers."

We publish this statement the more readily, because it is the first semi-official information that has come to our knowledge, relative to the action of the Board of Health upon the subject, and because we are pleased to learn that the Board took action so promptly in reference to the matter.

Army Hospitals.—There are in and around Washington nine general hospitals for the sick and wounded soldiers. There is also a general hospital at Annapolis, more especially used for convalescents. The number of beds prepared in them all is less than two thousand. There are also tent hospitals in all the various encampments, all having many conveniences and comforts. The number of sick in these latter, considerably exceeds that in the general hospitals at Washington, and as the cold weather is fast approaching, it renders the demand urgent for larger and warmer accommodations. Accordingly orders have been given for the erection of new hospitals upon the most improved models, for the accommodation of five thousand patients. These plans, carefully matured by the sanitary commission, provide that each patient shall have 17,500 cubic feet of air space, and every comfort that medical skill can devise. The buildings are to be arranged in groups, each group to accommodate 200 patients, and each ward to be a separate building, all to be connected together by corridors. They are to be of wood and one story high, a height which is commended as one of economy, safety, and salubrity. Rumors are current also, that the three residences originally built for Senators Douglas, Rice, and Breckenridge, have been rented for hospitals; and it is understood that a number of buildings have been rented in this city for the same purpose. The administration seems to be thoroughly alive to the magnitude of the great work before it.

—o—

Painted Fish.—The Parisian correspondent of the *Lancet* says, that dealers in shell-fish are in the habit of making the ordinary grey shrimps resemble the more valued scarlet variety by painting their shells with red lead.

Correspondence.

BOSTON CORRESPONDENCE.

Meeting of the Obstetric Society—Discussion on Puerperal Convulsions—Report of Committee on Sulphuric Ether—Pathological Specimen of Strangulated Intestine—The "Free Hospital."

Boston, November 1, 1861.

Messrs. Editors:—In spite of the long period which has elapsed since my last letter, I am afraid my budget will be scantily filled, and with matters of general interest only, even then. Our city still remains more than usually healthy. To what causes our immunity from epidemic sickness, is due, I cannot definitely say, but the fact, nevertheless remains indisputable, that there has been a large diminution of deaths the past year, as compared with the average of years previous.

At the last meeting of the Obstetric Society, held Sept. 5th, in the course of a discussion upon a case of convulsions during labor, the fact came out, that every gentleman present had had one or more cases similar, within a short period, and upon farther discussion, the number within the knowledge of the reporters, proved to be so large as to altogether exceed the average. The use of ether was discussed quite freely. In the experience of some of the reporters, it had proved immediately and entirely efficacious, apparently abating the force and putting an end to the convulsions. Others had tried it in vain. This corresponds in the main with the experience related at a meeting of the Society for Medical Improvement, at which the whole matter of convulsions and their treatment came up for discussion. The evidence in favor of treatment was just about neutralized by the evidence on the other side, that no treatment seemed to be of any avail. Dr. J. Bigelow suggested that the success or want of success in treatment might be due to the fact that puerperal convulsions might be divided into two primary classes, the hysteric and those resembling epileptic seizures. The former would finally recover even if nothing was done, but when the attack terminated in coma, but little was to be hoped from ether, and the danger was much increased under any form of treatment. There can be no doubt that in this discriminating diagnosis, lies the whole matter of treatment, and that if the attending physician will at the outset, when he is first called, determine to which of these two classes the case in hand belongs, he will be spared much annoyance from the failure of remedies. In connection with these remarks I may say here, that in the course of a conversation with a very intelligent physician in Maine last summer, I learned from him that of more than twenty patients seen by him in puerperal convulsions, he had not lost one. His treatment I give. Immediate vesication was produced by ammonia or any other powerful agent, over the pit of the stomach, the cuticle withdrawn, and sulphate of morphia applied on the raw surface. Its effect was to still the convulsions and produce sleep, from which the patient awoke relieved. The rationale of this treatment I am not inclined to discuss. Of the fact, from my knowledge of the physician who made the statement, and his standing in the community where he resides, I have not the slightest doubt. It is well worth a fair trial, inasmuch as it does not prevent anything else being done at the same time; and, moreover, we all know how little we can confidently expect from any treatment. The report of the committee appointed some time ago to collect information upon the subject of sulphuric ether, as you have seen, made their report to the Society for Medical Improvement at the meeting held Oct. 14th. There was quite an amount of pleasant speaking, but the society by almost a unanimous vote adopted the report, and endorsed the conclusions of the committee. With regard to the minority report, in which the mixture of four measures of ether and one of chloroform, was advocated for army use on the ground of less bulk and more speedy action; the evidence upon which it was based proved upon examination to be the merest assertion. No well authenticated case of its use could be found, and the conclusions of the committee still remain unshaken.

A very interesting specimen of "strangulated intestine" was shown at the last meeting of the same society. The band of false membrane which caused the obstruction was very slight, so slight, indeed, as to cause surprise that the functions of the bowel should have been suspended. A very interesting discussion ensued, upon the treatment of these cases. The propensity of the attendants to urge forcible measures upon the physician in attendance was mentioned, and the danger of such a course, as especially indicated by the specimen on exhibition was very forcibly put. What are the facts? We have in the first instance, probably, irritation, or simple obstruction, indicated by pain. So long as this is left alone, although the pain may be severe, there will be less likelihood of inflammation, and its consequences, than if we irritate or force the peristaltic action of the bowels with drastic purges. But in spite of this the usual course is step by step from mild measures to more severe, until we go from calomel to croton oil as a last resort. How much better from the first to adapt our remedies to prevent all action of the bowels; to keep them perfectly quiet till every vestige of irritation being removed the natural action of the bowels comes on, and the affair is safely ended. The fact that because when there comes a free

dejection, the pain and irritation are over, seems to have laid the foundation in the mind that post hoc is propter hoc, and, therefore, if you can produce a discharge from the bowels you cure the disease. A more mischievous doctrine than this cannot be. The fear that harm may come from the bowels remaining quiet for so long a time, as is often necessary to accomplish the object, is groundless, upon the evidence presented during the discussion. In some of the cases mentioned twenty-one days elapsed without any dejection, and yet not the slightest inconvenience was felt.

Dr. J. B. S. Jackson showed a specimen of a single gall-stone, as large as a filbert, with many broken portions of others, which were taken from a person nineteen years of age at an autopsy. The case Dr. J. remarked was interesting from the youth of the subject. In the course of the discussion ensuing, Dr. White remarked that he saw a patient in one of the hospitals in Vienna, from whom five or six gall-stones had been discharged through a fistulous opening in the side.

It seems to be the fate of all great undertakings to be unfortunate, and our Free Hospital is taking its place in that class. There is some hitch between the original committee and the committee on erection, and the matter bids fair to give rise to some some spicy newspaper articles at least.

Trimount.

NEW YORK CORRESPONDENCE.

Nocturna versate manu, versate diurna.—*Horace.*

It may not be amiss, on this occasion, to speak at length concerning the peculiar characteristics of the professors of the various colleges. Beginning, then, with the University Medical College, we introduce to the consideration of the community, Prof. Valentine Mott, emeritus, relative anatomist, and gentleman in particular. Dr. Mott may be divided into two parts, viz: lecturer and clinical instructor. To sum up his special qualifications, I would say that calm and measured truths, together with anecdotes of interesting purport, and the essence of vast practical experience, reward those who have even practiced some thirty years, and drop in to once more attend a lecture from the triplex surgeon who combines the scholar, Christian, and philosopher!

Prof. Draper never says one word too much, or gives utterance to an obscure suggestion; chiselled certitudes expose the chemistry of his profoundest cogitations. He fascinates by brevity and strikes conviction with the force of practical elucidation.

Prof. Post, the conscientious and well-read expounder of the surgery of modern times, reads out his lectures with precision and a clear enunciation. His clinic, perhaps, can rank among the best in this wide continent. On diseases of the eye, a fondness for long names appalls the juvenile Hippocrates.

May these vivisections be forgiven!

Prof. Bedford, at all times wins the strict attention of his interested class. Desirous of imparting aphorisms, that must never be forgotten by the doctor in the lying-in room, he strives, and with an earnest zeal, exposes to those present the great disadvantages of too much confidence; the sad results of ignorance and want of self-possession. Entering the lecture room with a determination to impress upon the student's mind, say four important facts, Prof. Bedford varies the expressions, turns over the same thought, unfolds it in another light, and by the most amusing stories that bear with force upon the channel of ideas, permanently carries out what was desired. Q. E. D.

Dr. Metcalfe, with a most convincing smile and accents of melifluous agreeability, is most happy in his common sense deductions and the plain elucidation of the mysteries of heart disease or the sad ravages of phthisis. Dr. Paine exhibits herbs, and with the patience of an alchymist, seconds the "predisposing or morbific causes" of certain fomites. His lecture on tobacco far surpasses the vituperations of mistaken James, of old, and from its very strength of collocated verjuice should be preserved in print.

Prof. Van Buren seems born to teach, and with æsthetic eloquence, to chain the mind while tracing out the network of a plexus, or the anatomy of hidden parts. I have never listened to a more agreeable and eminently satisfactory expounder of any branch of medicine.

Gourmet.

NEW YORK OPHTHALMIC SCHOOL AND HOSPITAL AT NO. 63 THIRD AVENUE, N. Y.

New York, Oct. 31. 1861.

Dr. M. Stephenson delivered the introductory to his *tenth* course of lectures on "Operative Ophthalmic Surgery" at the above institution, October 26th, to a large and attentive class of medical pupils and professional friends. The lecture was received with marked approbation by the entire audience. At its close Dr. S. announced that there would be one lecture and three cliniques every week until the 1st March. It was also stated that the opportunities for clinical instruction were very great, as over one thousand cases, with diseases of the eye were prescribed for annually at the hospital.

Dr. M. Stephenson, Dr. J. P. Garrish, and Dr. Marcus, P. Stephenson, are the attending surgeons, who are always happy to see their professional brethren, especially those from a

distance who may be spending a few days in the city. The institution is open every Tuesday, Thursday and Saturday from 12½ to 3½ o'clock, P. M. Oph-

---

PERCHLORIDE OF IRON AS AN ESCHAROTIC.

West TroyN. Y., Nov. 1861.

Messrs. Editors:—It is often difficult to remove the fungous growth arising from excessive granulations after the suppuration of carbuncles, &c. Recently having a troublesome case of this kind; after using the usual remedies such as nitrate of silver, sulphate of copper, without any benefit, I applied the perchloride of iron with complete success.

This powerful styptic will be found an excellent application in similar cases, and judging from its effects it might be used with good results in removing the remains of polypus after extraction with the forceps, in bleeding piles and in ulceration of the uterus.

I was led to make a trial of it in the case referred to, from a notice in a late number of the Reporter of its application in case of ingrowing toe-nail.

A. Shiland.

ARMY CORRESPONDENCE.

Camp of the New Jersey Brigade, Seminary, Fairfax Co., Va., *Oct.* 26, 1861.

Messrs. Editors:—During the present unhappy war, one acting in a surgical capacity in the army, will be able to pick up many things of interest to the profession. Wishing, while I am obtaining information for myself, to contribute, if I may be able, a little to the stock of others, I will, with your permission, detail from time to time cases of interest that may come under my notice. At this time, I wish to narrate the results of a recent post mortem, in a case where death was caused by a gun-shot wound.

During a skirmish near our outposts, early in the present month, a party of men belonging to one of the New Jersey regiments, were attacked by some rebel cavalry, and one of their number instantly killed. The enemy were driven back, and the body recovered and brought to the hospital by some of his companions.

Post Mortem Examination—External.—On making an external examination we found, first, a bullet hole through the left wrist, on its palmer aspect, the wound at this point was small, much smaller than either of those which were noticed subsequently. Next a bullet wound was found in the left breast, over and penetrating the fifth rib, through which the finger could be passed into the cavity of the heart; and, again, another bullet wound on the right side, posteriorily, and under the right scapula. The wound in front was larger than that at the back, which last was larger than that through the wrist.

Internal.—On opening into the cavities of the chest and abdomen, the ball was traced through both ventricles of the heart, through the diaphragm near the crura of the liver, nearly to the right side where it re-entered the diaphragm, and passing outwards and upwards, made its exit under the scapula of the right side and through the eighth rib.

The points of interest to us were these, first, the irregular course of the ball, and next, as showing that the wound, at the entrance, in these cases is not of necessity smaller than that of exit. From this latter fact, however, we supposed the shot had been received from behind, (the more so as the posterior wound was not everted); and were not entirely satisfied until on enlarging the posterior opening the broken splinters of the rib were found directed outward. Our conclusion was this, and the testimony of his comrades confirmed it: That the soldier had his gun at a charge, and was about to thrust the man who was coming towards him, but the latter fired on him with a pistol, the ball passing through the wrist, then entering the chest, carrying with it a *portion of cloth*, passing through the heart, then downward through the diaphragm, on the lower surface of which the cloth was left; then along the liver, again upward and outward through the diaphragm, and out through the rib, muscle, and skin, as before stated. The wounds in the wrist were smaller than either of the others, because of the greater velocity of the ball, and the front wound larger than the posterior, on account of the cloth which accompanied the ball. Hoping you may think the case of enough interest to publish it, and that others may think it so.

I am,
Very truly yours,
J. D. Osborne.
Ass't Surgeon, 4th Reg., N. J. V.

LETTER FROM FORTRESS MONROE.

Weather Statistics—Released Prisoners in the Hospital—United States General Hospital.

Fortress Monroe, Va., Nov. 5.

For the information of your scientific readers, I send some statistics of our fall weather here, taken from the Meteorological Register, kept at the Garrison Hospital. They form a continuation of the table sent under date of September 12th:—

Monthly mean of temperature at the hours stated:—

	7 A.M.	2 P.M.	9 P.M.
Sept. 1861.... .72	deg. Fahr.	77 deg.	73 deg.
Oct. 1861.....65	" "	70 "	66 "
Sept. 1860.....71.13	" "	76.10 "	70.70 "
Oct. 1850.....61	" "	67 33 "	63.66 "

Highest temperature reached at the hours stated:—

September, 1861, 78 degrees on the 12th; 85 degrees on the 6th; 81 degrees on the 12th.

October, 1861, 80 degrees on the 6th; 86 degrees on the 6th; 80 degrees on the 5th.

Lowest temperature reached:—

September, 1861, 60 degrees on the 29th; 65 degrees on the 29th; 64 degrees 28th and 29th.

October, 1861, 50 degrees on the 24th; 58 degrees on the 24th; 55 degrees on the 24th.

Sept., 1861, daily mean of temp.,		74	deg.
" 1860,	" "	72.64	"
Oct. 1861,	" "	67	"
" 1860,	" "	64	"
Rain fell during Sept., 1861,		1.55	inches.
" " Oct. 1861,		5.60	"
" " Sept., 1860,		0.95	"
" " Oct., 1860,		6.53	"

Days on which rain fell, in September, 1861, 4; in October, 1861, 4; in September, 1860, 2; in October, 1860, 6.

Range of thermometer early in November, 1861:—

	7 A.M.	2 P.M.	9 A.M.
November 1,	64 deg.	70 deg.	65 deg.
" 2,	65 "	70 "	64 "
" 3,	56 "	60 "	60 "
" 4,	54 "	60 "	58 "

Rain fell in Friday's storm, ending November 2, 1.40 inches.

The trees here of the same kind as those of the North retain their foliage almost a month later in this latitude this year than is usual there.

Of the Federal wounded prisoners, who arrived here on the 7th of October, and a part of whom remained in the hospital, only ten are now remaining. The others recovered so as to be forwarded to their homes; they departed about one week since. They recovered admirably here, with everything in their favor. It is expected that the last ten will soon be able to travel. Of the twenty-nine who stopped here, I learn that a considerable proportion are disabled for life in some respects. The injuries of the whole party were received at Bull Run. They spoke in high terms of the surgeon who has had immediate charge of them in the hospital here, Dr. White, of the United States army. A pleasing fact was the sympathy and kindness shown them by their brother soldiers, and the Seventh Regiment, New York Volunteers; and the Tenth Regiment, New York Volunteers, gave practical proof of their good will by contributing money, so that each poor fellow was presented with two dollars by the former, and two dollars and fifty cents by the latter.

The United States General Hospital is in admirable order. Ample preparations have been made for the supply of warmth this winter. Here the substantial, wholesome food for the convalescents, and the savory broths and refreshing drinks prepared for the sick, and the thick, warm blankets, show how well the sick soldier fares at Fortress Monroe.

The large, pleasant dining rooms for those able to go to their meals, and the fine large reading-room (the old ball-room of the hotel) are especially worthy of admiration. In the latter room are large tables, provided with the current newspapers, with magazines and books, which are fully appreciated and conned by the convalescents. Writing materials are also kept in this room for the patient's use. The convalescent wounded and sick, unable to leave their rooms, have papers and books brought them by their comrades, and their moments of pain and ennui are often shortened by the presence of the cheery, good old chaplain, Rev. Mr. Chivers, (for thirty years past Post Chaplain at Fortress Monroe.)

At this hospital are now 143 patients, of whom 57 are convalescent. Several of the sick of the fleet were left here. During the month of October, six deaths occurred at this hospital.

This is a very small proportion for the nearly three hundred cases treated during the month, and all the worst cases are sent to the General Hospital.

NEWS AND MISCELLANY.

Hospital Burned.—On Monday morning last, the E street hospital or Washington Infirmary, at Washington (D. C.) was entirely consumed by fire. Nearly one hundred sick and wounded soldiers were in the building, besides a considerable number of other government patients. They were all rescued with one exception, an aged woman, who, it is supposed, perished in the flames. The Sisters of Charity, under whose care, as nurses, the infirmary was placed, escaped with only the clothing they hastily put on, everything else was lost. Surgeon White lost all his personal effects, together with the books and papers of the Institution. The Assistant Surgeons Drs. Gooley and Pooley, lost nearly all their clothing. The whole energy of the people was concentrated in saving the patients. The loss to the Government at this particular juncture, when all its hospital accommodations are overtaxed, must be exceedingly heavy.

Dr. Washington J. Duffee, late Surgeon of the 29th Reg. P. V., has been promoted to the position of Brigade Surgeon, and is attached to Gen. Bank's division. The doctor rendered important services to the wounded at the battle of Balls Bluff, or, in other words, we suppose did his whole duty.

Health of Iowa Troops.—Surgeon Charles H. Rawson gives the following report of the sick and wounded of the Fifth Iowa Volunteers for September, 1861: Intermittent fever, 191; remittent, 27; diarrhœa, acute, 157; dysentery, acute, 12; tonsillitis, 3; indisposed, 75; pneumonia, 2; bronchitis, 12; pleurisy, 1; rheumatism, acute, 2; lumbago, 1; nephritis, 1; abscess of arm, 1; furuncle, 2; erysipelas, 1; cholera morbus, 1; debility, 2; conjunctivitis, 7; neuralgia in face, 3; odontalgia, 2; piles, 3; incised wound, 1; gunshot wound in hand, 1; hernia, 1. One death and one suicide.

The Sick Prisoners at Fort Warren.—In a recent letter from a visitor to this receptacle of political prisoners, we find the following items relative to the sick. There are about fifty now in the hospital. A few have the typhoid fever. Several have consumption, aggravated by a change of climate. Many have bronchitis and pneumonia, and the coughing is almost incessant. Some have the measles and mumps. They are all under the care of Dr. De Witt Clinton Peters, of New York, who was taken prisoner with Col. Reeves' command in Texas, and is now on parole.

Massachusetts Medical Benevolent Association.—The members of this association held their annual meeting at their rooms in Temple place last week. In the absence of the President, Dr. John Homans, of Boston, presided. The record of the Society, for the past year, was read by the Secretary, Dr. J. N. Borland, and accepted. The Treasurer, Dr. Francis Minot, reported that he had received during the past year, chiefly from assessments, the sum of $128, and interest amounting to $68 05. The balance from last year's account was $1,801 38. The whole amounting to $1,997 43. The amount expended was $9 66, leaving a balance of $1,987 77, which is chiefly invested in the Savings Banks —$99 being in the U. S. Treasury Notes, and $23 08 in cash, in the hands of the Treasurer.

The following gentlemen were chosen officers of the Society for the ensuing year: Dr. Geo. Hayward, President; Dr. Aug. A. Gould, Vice President; Dr. J. N. Borland, Secretary; Dr. Francis Minot, Treasurer; Doctors George Lyman, W. J. Dale, John Homans, George Hayward, Jr., and R. M. Hooper, of Boston, W. W. Wellington, of Cambridgeport, Anson Hooker, of East Cambridge, P. M. Crane, of East Boston, and B. E. Cotting, of Roxbury, were appointed Trustees.

Exercise for Soldiers.—Among the innumerable items with which the great naval expenditure is supplied, are several hundred *footballs.* These are intended for the exercising of soldiers when remaining in camps. Napoleon once asserted, that "the strength of an army is in the legs," and there is, perhaps, no better way of strengthening soldiers legs than by playing at football.

MARRIED.

Tweedale—Stevenson.—At Fort Rowan, Canada West, October 24th, in St. John's Church, Joseph M. Tweedale, M. D., to Maria C., daughter of Wm. H. Stevenson, Esq., American Consul at Port Rowan.

Campbell—Roger.—At Greenock, Scotland, Oct. 17th, by the Rev. J. M. McCulloch, D. D., Francis Wayland Campbell, M. D., L. R., C. P., London, of Montreal, son of Rolla Campbell, Esq., Proprietor of the *Pilot*, to Agnes Stuart, youngest daughter of Alexander Roger, Esq., and granddaughter of the late Walter Washington Buchanan Esq., M. D., of "Bagatelle Villa."

Keating—Borie.—On the 7th inst., by the Rt. Rev. S. F. Wood, at the Episcopal Chapel, William V. Keating, M. D., to Eliza, daughter of the late J. J. Borie, Esq., of this city.

DEATHS.

Ritz—At Lewistown, Pa., on the 2d instant, at the residence of his father, Judge Charles Ritz, A. H Ritz, M. D., late of this city, in the 29th year of his age.

Answers to Correspondents.

Dr. H. F. W, Delaware.—Some years since we called the attention of the profession to the claims of Hydrangea Arborescens in cases of sabulous and gravelly deposits in the bladder; and in former numbers of the Reporter several practitioners have recorded their favorable experience with it. The root, or a fluid extract prepared from it, can be procured in this city, of Parrish, 800 Arch street, or of Bullock & Crenshaw. Tilden & Co., New Lebanon, N. Y., also prepare a fluid extract. The following has been a favorite mode of preparing it:

R. Fresh root of Hydrangea Arborescens, 2 lbs.
Water, - - - 6 qts.

Boil down to two quarts, strain, and add one quart of honey, and boil down to one quart.

Dose—A teaspoonful twice or three times a day. Under the use of this remedy large quantities of sand and gravel have been removed from the bladder. It should have a more extended trial.

Dr. J. C., Ohio.—The Cincinnati *Lancet and Observer*, or *American Medical Monthly*, published in New York, are both excellent *monthly* journals. The *American Journal of Medical Sciences*, published *quarterly*, in this city, we can also recommend, The two former at $3 per annum, the latter $5.

Dr. A. B. D., Pa.—We repudiate the title "allopathic" as applied to any legitimate medical college. Such methods of distinction belong to quackery alone. There is a medical college at Cincinnati which commenced its sessions October 29th. The Dean of the Faculty is George C. Blackman, M. D.

Dr. J. S., N. Y.—The Reporter has been sent regularly to your address. The fault must be with your Post-Master, who has failed to deliver them.

Communications Received

Connecticut—Dr. D. Calkins, (all right); Dr. O. B. Griggs, with encl.; C. H. Wilson, do; Dr. C. B. Bromley; Dr. C. C. Foote, with encl.; Dr. A. W. Coates, with encl.; S. Thompson, with encl.; Dr. C. R. Hart; Dr. Joseph Palmer, with encl. *District of Columbia*—Dr. J. Roberts. *Delaware*—Dr. Shivers, with encl.; H. F. Willis, do. *Illinois*—Dr. E. C. Ellet, with encl.; J. M. Mack, do; *Indiana*—Dr. John Lewis; Dr. M. F. Thomas, with encl.; Wm. F. King, do. *Iowa.*—Dr. G. M. Staples, (2) (numbers have been sent); Dr. John Kerr, with encl.; M. Cousins, do; A. C. Taylor, do. *Maryland.*—Dr. W. J. Evans. *Massachusetts*—Dr. Proctor; Dr. Wm. E. Rice, with encl.; J. H. O. Kelly, do;

Drs. B. Hubbard, B. F. Green, N. Torrey, W. M. Herrick, N. E; Mutual Life Ins. Co.. with encl., Drs. J. L. Moore, D. B. Whittier. O. King, E. N. Jones, S. Richardson, A. Poole, A. G. Hall, (all right); O. M. Humphrey, (all right). *Michigan.*—Dr. M. H Raymond, with encl. *New Hampshire*—Dr. O. L. Bradford. *New Jersey*—Dr. G. E. Butcher, with encl.; R. Marshall, do; Drs. J. F. Shoemaker, Chas. Hasbrouk; Drs. Geo. F. Fort, with encl.; George Goodall, do; Z. A. Vandeventor, do; D. S. Reeve, do; J. Craig, do; J. N. Quimby, do; J. B. Burdett, do; J. Hornblower, do; J. E. Noble, do; L. W. Elder, do; G. W. Talsom, do; W. A. Durrie, do; A. A. Lutkins, do; Dr. C. Shepherd; Dr. E. Jobs, with encl.; Dr. Jamison, do; J. A. Leighton, do; C. S. Haley, do; C. B. Jaques, do; B. Thornton, do; N. Jennings, do; J. F. Grandin, do; W. S. Creveling, do; J. S. Cook, do; —— Willard, do; Sickler, do. *New York.*—Drs. J. Cox, W. F. Underwood, G. K. Smith (2), A. R. Avery, A. R. Gipert, L. Shafer; Dr. Isaac E. Taylor, James Hadden, G. V. Saltonstall, W. McCready, R. S. Chapin, David Smith, W. Parker, B. J. Stow, H. Shepherd, J. W. Shepherd, J. J. Bassora, D. C. Enos, J. J. Barber, Horace May, J. J. Richmond, J. H. Burge, J. H. Talmadge, Wm. Gilfillan, L. Bauer, —— Simms, each with encl.; Dr. H. H. Nye, Dr. L. Riddell, with encl.; A. Cochrane, do; J. J. Richards, do; M. Bansinger, do; W. A. Townsend (2); Dr. L. Ellsworth, with encl.; Dr. M. Stowell; Dr. J. R. Craig, with encl.; S. S. & W. Wood; Dr. L. Moore, with encl.; Drs. J. Homberger, G. W. Barr, I. F. Scott, with encl.; M. Bevior, do.; S. W. Danna, do; J. Flamery do; Otto Roten, do; C. F. Mermier, do; Willets, do; Cullen, do; J. H. Rooney, do; Dr. W. W. Fleming, Dr. J. M. Stephenson; Dr. S. E. Parsons, with encl. *Ohio.*—Drs. T. R. Simpson, with encl.; W. Brinkerhoff, do; A. F. Fischer, do; C. N. Kramer, do; D. S. Gans, do; Dr. A. C. Barlow; Dr. P. H. Clark, with encl.; J. Baggs, do; W. H. Taylor, do; Dr. H. P. Kay; Dr. F. Bigelow; Drs. Geo. Mendenhall, —— Jones; I. F. Capell; Drs. G. C. Hildreth, with encl., C. W. Fischer, do; H. Cooney, do; A. C. Barlow, do. *Pennsylvania*—Drs. McKinnon, with encl.; G. W. James, do; —— Curwen, do; A. K. Tyson, do; J. Gramer, do; J. W. Potter, do; A. R. Dill, do; P. S. Leisinring, do; J. McCarrell, do; H. U. Umstead, do; S. S. & R. S. Wallaee, do; Dr. C. R. Early; Dr. Wm. Taylor, with encl.; S. H. Harvey, do; John Fay, do; Drs. A. G. Ely, S. M. Bleakney: Drs. W. H. Magill, with encl.; Charles T. Waage, do; William Herbert, do; B. F. Bunn, do; —— Longshore, do; J. B. Crawford, do; C. H. Budd, do; J. L. Atlee, do; C. K. Cowdrick, do. *Rhode Island*—Dr. A. G. Sprague, (all right); Dr. *A.* A. Mann, Dr. I. G. Davis, Dr. L. W. Briggs, with encl. *Vermont.*—Dr. George C. Briggs, with encl.; E. D. Warner, do. *Virginia*—Dr. R. K. Brown, with encl. *Wisconsin*—Dr. C. L. Stoddard.

Office Payments.—Drs. Stees, Filbert, Burpee, Hay, Spencer, Stein, Byington; Mr. Baeder, Drs. Glentworth, Walker, Welsh, Hummell, Miller, Evans, Tutt, Budlong, Updegrove, Atkinson, Schmœle, Kline, Chipman, Starkey, Riley, Lyons, Granger, Sutton, Remington, Gilliams, Brunon, Conrad, Roberts, Harper.

VITAL STATISTICS.

Of Philadelphia, for the week ending Nov. 2, 1861:

Deaths—Males, 126; females, 101; boys, 80; girls, 59—Total, 227. Adults, 88; children, 139. Under two years of age, 76, Natives, 172; Foreign, 36. People of color, 8.

Among the causes of death we notice—Apoplexy, 1; convulsions, 6; croup, 9; cholera infantum, 1; cholera morbus, 0; consumption, 33; diphtheria, 7; diarrhœa and dysentery, 5; dropsy of head, 4; debility, 11; scarlet fever, 14; typhus and typhoid fever, 4; inflammation of brain, 4; of bowels, 3; of lungs, 11; bronchitis, 2; congestion of brain, 6; of lungs, 3; erysipelas, 0; whooping cough, 0; marasmus, 8; small pox, 6.

For week ending November 3, 1860.....226
" " " 2, 1861.....227

Of New York, for the week ending Oct. 28, 1861:

Deaths—Males, 220; females, 181; boys, 136; girls, 100. Total, 401. Under two years, 176. Natives, 280; Foreign, 121.

Among the causes of death we notice—Apoplexy, 4; infantile convulsions, 31; croup, 5; diphtheria, 4; scarlet fever, 14; typhus and typhoid fevers, 8; cholera infantum, 18; cholera morbus, 1; consumption, 63; small pox, 4; dropsy of head, 17; infantile marasmus, 26; diarrhœa and dysentery, 16; inflammation of brain, 14; of bowels, 8; of lungs, 24; bronchitis, 6; congestion of brain, 11; of lungs, 3; erysipelas, 0; whooping cough, 4; measles, 3. 212 deaths occurred from acute disease, and 45 from violent causes.

Of Boston, for the week ending Oct. 26, 1861:

Deaths—Males 30; females, 29. Total, 59. Under five years of age, 30. Natives, 44; Foreign, 11.

Among the causes of death we notice—Phthisis, 13; cholera infantum, 7; croup, 0; scarlet fever, 1; pneumonia, 2; variola, 0; dysentery 1; typhus fever, 1.

Medical Directory.

Under this head we propose to give such information in regard to the Medical Colleges, Hospitals, and Societies of the City as we may be able.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr Gerhard.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesday's and Saturday's, at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street—Clinical Lectures, daily, (except Sunday,) from 2 to 4 P. M., by Dr. Goodwillie.

Wills Hospital for the Eye and Limb.—Clinics, Monday and Friday at 12 M., by T. G. Morton, M.D.

Howard Hospital, Lombard street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P. M. Monday and Thursday—Dr. Turnbull, at 1 P. M. Tuesday and Friday—Dr. Darrach, at 12 M.: Dr. Klapp, at 5 P. M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1, and Dr. Morehouse, at 5 P. M. Monday and Thursday—Dr. Meigs, at 5 P. M. Tuesday and Friday—Dr. Atkinson, at half-past 3 P. M.

CONNECTICUT MUTUAL LIFE INSURANCE COMPANY.
HARTFORD, CONN.
Accumulated Capital over $4,000,000.
JAMES GOODWIN, President. G. R. PHELPS, Secretary.
OFFICE IN PHILADELPHIA: 404 WALNUT STREET.

This Company, incorporated in 1846, on a system entirely Mutual, furnishes Insurance to the policy holder at the Actual cost. There is no Stock or Guaranty Fund to absorb the profits, but *all the profits* are *annually* credited to the policy holders, and may be appropriated to the payment of premiums after the first four years.

It offers *abundant* Security in an accumulated Fund, derived from premiums, amounting to more than

FOUR MILLIONS OF DOLLARS!

Its economy in the management of business have permitted dividends to policy holders, which have averaged 50 *per cent. per annum.* It has thus divided in profits among the insured nearly Two Millions of Dollars.

It is prompt in Payment of Losses. It has paid more than Two and a-half Millions of Dollars, for losses by death, and in no instance has payment been delayed beyond the time it was due.

It accommodates the insured on *Life* policies by receiving a note for *one-half* the premium when it amounts to fifty dollars or more, thus furnishing insurance for double the amount, for about the same *cash* payments as is required by most other companies, while the dividends are applied to cancel the notes. Parties, however, if they prefer, may pay all cash, in which case the dividend will be paid in cash.

Applications for Insurance received, and Pamphlets, and every information in regard to the business, furnished on application, by mail or otherwise, to

WADLEIGH & TILDEN, Agents,
404 WALNUT STREET,
Philadelphia.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 265. PHILADELPHIA, NOVEMBER 16, 1861. NEW SERIES, VOL. VII. NO. 7.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

By a Hospital Surgeon of Philadelphia.

(*Continued from page* 103.)

When upon the subject of the removal of foreign bodies from wounds inflicted by fire-arms, we dwelt at some length upon the importance of having properly constructed forceps for the removal of leaden bullets, and illustrated our remarks by cuts of the ordinary forms, and a new modification by D. W. Kolbe. We have the pleasure of again bringing the subject before our readers, by giving them a drawing and description of a most simple but admirable instrument for the removal of leaden bullets, more especially the Minié-rifle ball, which is so destructive to life in modern warfare. This instrument is the invention of an ingenious Surgeon of this city, Dr. Richard J. Levis, to whom the profession are indebted for several other valuable improvements in surgical appliances.

It consists of a steel tube ten inches long, with a hook-shaped projection at one end, terminating in a sharp point, which presents back toward the tube. Within the tube slides a steel rod sharply pointed at one end, and having a button-shaped handle at the other. When the end of the instrument can be made to touch the bullet, any convex or projecting surface on it may be seized and firmly held between the points, which are pressed into the lead. If the instrument should be withdrawn without the bullet, the point on the sliding rod should first be pushed in contact with the other point, thus effectually guarding the hook from catching in the tissues. The instrument, which is represented reduced in size in the cut, occupies but little more space than the ordinary bullet probe, and may be used for that purpose. It can be more readily introduced in the track of a projectile than the bullet forceps, and in security of hold on the bullet, it exceeds any contrivance which has been heretofore presented.

CONCUSSION OF THE BRAIN.

Dupuytren was the first to draw attention to the circumstance that contusion of the brain might be produced without injury to the bony covering, and attributed the possibility of its occurrence to the elasticity of theskull. He was borne out by Von Walther, who said that every concussion of the brain was combined with some contusion of that organ.

Dr. Stromeyer goes a step further, and thinks that concussion of the brain is in fact *nothing else but contusion of that organ*, which, in its momentary compression, may have suffered many and different injuries in its substance.

We should also remember, for our encouragement, the valuable observations of M. Quesnay. The brain is formed of such delicate substance, and its functions are generally so important to life, that it would seem as if the smallest shock, or the slightest wound, would cause irreparable injury, and attack life at its fountain-head. We have, however, numberless observations serving to dispel this groundless fear, from which we learn that wounds of

this organ, especially those of the cortical and medullary substances, heal almost as readily as wounds of most other viscera.

Concussion of the Brain is divided into two forms—

1st. *Simple form*, where an interruption only of the functions of the organ follows the injury.

2d. The complicated form, where the brain itself is injured, and associated with extravasation of blood either upon or within its structure.

Treatment under the head of "simple concussion"—Rest, application of cold to the head, warmth to the feet, and, in some few instances, the administration of a mild purgative. Symptoms—Loss of consciousness, more or less perfect; also, loss of motion. If the patient is seen at this time the skin will be found cold, and the features more or less contracted, the pulse low and intermittent, pupils very variable, in some cases dilated, in others contracted, and in a third class one will be dilated and the other contracted.

In fifty-six examples of this description, in eight of which scalp wound existed, by the above treatment, perfect recovery ensued.

CONCUSSION OF THE BRAIN, COMPLICATED WITH SOME LESION OF ITS STRUCTURE, OR EXTRAVASATION OF BLOOD.

In these cases there will be found some extravasation of blood either upon its surface or within the membranes, or within the meshes of the pia mater, and if the latter, some ecchymosis of the cerebral convolutions will generally be present.

As inflammation soon shows itself after such severe complication, the rule of practice is to push the antiphlogistic treatment to the utmost; to employ mercury with great freedom, both internally and externally, and also counter irritation. Mr. Andrew Ellis, of Dublin, orders the head to be shaved, and the following lotion to be applied to the swelling, if ice cannot be had.

℞.—Muriatis Ammoniæ, - - ℥ij.
Aceti Destillati, - - - f℥ij.
Aquæ Destillatæ, - - f℥xix. M.
ft. lotio more dicto applicanda.

Giving internally calomel and pulvis antimonialis.

FRACTURE OF THE SKULL.

A bloody tumor of the scalp is liable to be mistaken by young surgeons for a depressed fracture of the skull, more especially if it should be attended with general symptoms as indicate injury of the brain.

The symptom which a bloody tumor may have in common with a depressed fracture, is the yielding spot in the centre of the tumor, while it is circumscribed by a firm margin. In order to ascertain, as far as possible, the precise nature of a doubtful case, the surgeon should pass his finger for some distance over the tumefied part, and if it were merely an extravasation of blood, the finger would, in the first instance, rise over the elevated margin of the swelling, and then sink into a little well in the centre. If strong pressure be now made with the finger, the bone may be felt beneath, and no convulsive twichings of the muscles, or other symptoms indicative of compression of the brain excited; whereas, if the case were a depressed fracture only, the finger would not rise above the natural level of the scalp, previous to its sinking into the cavity caused by the depressed state of the bone. In the latter case pressure with the finger would, in all probability, produce symptoms of compression, or increase those which may have previously existed. In such cases we have almost always

COMPRESSION OF THE BRAIN.

The brain may be compressed by a fractured bone, foreign bodies, extravasated blood, pus, or serum. I have just informed you of the best way of distinguishing between a bloody tumor of the scalp and a depressed fracture unattended by a wound, and although you may not be able fully to satisfy yourself as to the exact nature of the case, you should not cut down to the bone. It is true that the surgeons of former years, if they found a fracture, no matter how simple, would not rest satisfied without cutting down to the bone, but they would even proceed to trepan the patient, being under the impression that it was necessary to do it in order to *prevent* the occurring bad symptoms. This was the advice of Pott.

In cases of fracture with obvious depression of the bone, but unattended with a wound or bad constitutional symptoms, the rule of practice at the present day is not to cut down through the scalp, but to treat the patient antiphlogistically on prophylactic principles.

If there is, however, any foreign body in the wound, or the bone be depressed, it should be elevated, and the foreign body removed.

In regard to the operation of trephining, which I stated was, in olden times, resorted to,

alas, too often, the following admirable rules are laid down by Ellis, of Dublin, in his Clinical Surgery:

"First. The operation being in itself dangerous and liable to cause death, should never be performed except, when, after mature consideration of the case, you have arrived at the conclusion, in your own mind, that it cannot render the patient's condition worse than it was before, and that, on the contrary, there is reason to suppose it is calculated to improve it.

"Secondly. In a case of compound fracture, with depression of the bone and bad constitutional symptoms, the operation ought to be performed with as little delay as possible.

"Thirdly. In a case of compound fracture with depressed bone, and a foreign body, although the constitutional symptoms may not be urgent, the operation ought to be performed; for, in such a case, the unnatural state of the parts must necessarily give rise to inflammation, which may prove fatal; or, if it do not, the probability is, that the patient will be subject to epilepsy, or some other disease of the brain, which will tend to shorten life."

Thomas Bryant, Lecturer upon Operative Surgery, at Guy's Hospital, has the following observations, published in 1860, upon the use of the trephine and other means of relieving compression of the brain, the result of a fall upon a sharp object, or a quick blow from a pointed one, that such symptoms, as a rule, are produced by local causes, such as depressed bone or extravasation of blood from rupture of the middle meningeal artery.

That such *local injuries*, when giving rise to general symptoms, should be treated by elevation of the bone, if depressed, but if no general symptoms are present, unless the bone is comminuted, and can be easily removed, no operation is indicated; a local pressing of the brain alone, unaccompanied with symptoms, generally doing well.

That when compression of the brain follows as a secondary result of *a local injury* over the course of the meningeal artery, that is, after an interval of time, when reaction has been established, although no depressed bone may be present, it is probably produced by a rupture of one of the arterial branches; the operation of trephining may be performed with a chance of success, although it is rare to find a very local extravasation, the blood generally passing downwards towards the base, where the operator cannot reach. That when *compression of the brain* follows as a secondary result, *a general injury*—although that compression is evidently produced by extravasation of the blood—the operation of trephining is useless if not injurious.

"Extravasations within the skull, which are so important in civil practice, are of little importance in gunshot wounds of the skull. Those who know the symptoms of gunshot wounds with depression, will never be liable to confound their immediate symptoms, or their symptoms at the period of congestion, with those of traumatic extravasation. The diagnosis of these two conditions is well established by Dr. Stromeyer*, as well as the differential diagnosis of concussion from pressure on the brain. In the former, the symptoms are paleness of the face, a thin, weak pulse, quiet respiration, contracted or not materially altered pupils, and gradual decrease of the symptoms, which showed the highest intensity directly after the infliction of the injury. Pressure on the brain is accompanied by a flushed face, a full, slow pulse, snoring respiration, enlarged pupils, gradual increase of symptoms and paralysis of the body on the opposite side to that on which the head has been injured. Dr. Stromeyer has not observed a single case of gun-shot wound of the head in which he had been induced to attribute the symptoms to internal hemorrhage. Dr. Beck relates an interesting case of an officer, who died on the fifth day after having received the wound. He felt well enough to dine with his friends, and to write letters the night before the morning on which he suddenly died. Besides the gun-shot fracture of the occiput, the post-mortem examination revealed the presence of a large effusion of blood into the cavity of the skull.

"The chapter On Congestive and Inflammatory Reaction of the Head contains censures on the present state of therapeutics and the do-nothingism of our days. *Osteitis cranii traumatica* is anatomically well illustrated. The double direction which, under some circumstances, the motion of the blood takes in the veins of the diploë, is exemplified by the remarkable encysted hemorrhagic effusion of the skull described by Hecker, Dufour, and Stromeyer, which are produced by mechanical separation of the pericranium from the skull; the pouch being filled with blood from one of the large sinuses by means of one or more of the emissaria Santorini. These hemorrhagic cysts (*Varix traumaticus*, Bruns) become distended by blood on any congestion of the brain taking place, and empty their contents into the sinuses as soon as the cause of congestion subsides. They represent, on a large scale, the physiological process by which blood is drained from the external part of the head by the sinuses of the dura mater.

A case, where a girl of sixteen lost her whole

* Principles of Military Surgery. Translated by J. L. W. Thudichum, Hanover 1855.

scalp in a mill, and escaped with her life, is related as a proof that the skull may be deprived of most of its blood vessels without permanent damage. Hemorrhages from the diploë during trephining, as observed by Dupuytren, Hecker, and others, are explained by the compression which the congested and expanded brain exerts upon its venous sinuses. The question is put to pathologists, What relation does this arrangement of the circulation of the head bear to pyæmia, and what share has it in the production of that disease? The following case has a direct bearing on the question of pyæmia from wounds and diseases of the head, and shows moreover how much caution must be exercised before believing a pathological fact to be complete:

"In 1850, at Rendsburgh, Dr. Stromeyer was present at the post-mortem examination of a man who was said to have died from intropulsion of erysipelas of the head. He had suffered from erythema of the right side of the face, which had disappeared after twenty-four hours. The man had fallen into a soporous state, and died on the fourth day. Nothing worth noticing was found inside the skull. On opening the chest numerous pyæmic lobular abscesses were discovered in the lungs. Dr. Stromeyer now inquired whether the man had not had some small wound, and was informed, that before he entered the hospital he had a small boil just above the right eyebrow, which had been squeezed open by the surgeon of the regiment. Upon that the erythema set in, which caused him to be sent to the hospital. Though the seat of the small furuncle was not any longer clearly perceptible, yet Dr. Stromeyer caused the vein in the neighborhood of the spot to be laid free, and found it filled with pus up to where it entered the facial vein. From this insignificant place, therefore, the blood had been impregnated with pus. The short distance which the pus had to traverse in this case, in order to make its way into the right side of the heart, explains to some extent the rapid progress of the case."

Dr. Stromeyer afterwards saw at Kiel two similar cases of fatal boils of the upper lip. Professor Weber has collected seven cases of this kind, inclusive of Dr. Stromeyer's cases, which occurred at Kiel or in its neighborhood.

From all this, and from the fact that death always ensues under cerebral symptoms, it is likely that pyæmia occurring in patients with gun-shot wounds of the head, is the result of the entrance of pus through the large venous canals in the interior of the head.

Reaction of the Brain and its Membranes.—The direct consequence of any lesion of the brain or skull is a tendency to pyæmia, which easily passes into inflammation and its terminations, The inflammation following wounds of the head may be of two kinds,—acute (primary) or chronic (secondary); the former developing itself out of the hyperæmia, which follows the lesions directly; the latter showing itself at a later period, even after weeks or months of apparently perfect good health. Primary encephalitis, with its congestive erethic, and paralytic states, the author describes in a practical manner. The post-mortem appearances are given; and of these we mention, as a remarkable feature, the fibrinous concretions in the sinuses and the veins of the cerebral membranes, into which they may be traced and followed for several inches. In secondary inflammation of the brain, the concretions are most frequently met with in the longitudinal sinus. They are, it seems, a natural sequel of acute encephalitis, and are formed of necessity whenever swelling of the brain compresses the superficial veins, if at the same time hyperinosis renders the blood more liable to coagulation. Coma and paralytic symptoms denote the formation of these concretions.

The modifications of inflammation of the brain by complications—such as concussion, internal hemorrhage, or depression—are made subjects of serious inquiry. On correct views regarding these points will depend the solution of the question, whether trephining should be resorted to or condemned.

The author gives a description of the transformations which the injured substance of the brain may undergo. The following is a brief summary of the intra-cranial lesions adverted to:

1. If the dura mater be injured, no further symptoms may arise. In this case the compressed part of the brain fills again with blood, after removal of the pressure, as Guthrie observed after extraction of depressed fragments or removal of extravasated blood.

2. The patient dies, and the substance of the brain is found, underneath the injured spot, in a state of red softening.

3. The dura mater is injured, and the contused brain comes into contact with the air. This case generally has a fatal issue, as was observed by Smucker. Dr. Stromeyer relates an illustrative case. The patient died of gangrene of the contused part of the brain, because the line of demarcation failed to be formed. This demarcation must be a double one; firstly in the brain itself, and, secondly, on the surface of the brain, so that a cohesion of this organ with the dura mater may take place, in order to protect the so-called sac of the dura mater against the admission of pus and ichor. Most patients die from the difficulties which stand in the way of the accomplishment of this process.

4. The dura mater has been disintegrated by the original injury, or has been cut into intentionally after trephining, or has been destroyed in the circumference of the wound by gangrene or ulceration. The case of a soldier is related, who was shot in the left part of the frontal bone. A fortnight after the injury had been inflicted, the brain protruded from the two open-

ings in the frontal bone, in consequence, as was found, of an abscess, three inches long, in the left anterior lobe, which had caused this enormous expansion of the brain (fungus cerebri). This case illustrates, also, the next-mentioned transformation of the contused part of the brain.

5. An abscess is formed, with or without expansion.* Von Walther says, that these abscesses are sometimes of a size beyond all conception.

6. The contused part of the brain remains constantly under the compression of the depressed part of the skull. It was known centuries since, that depressions of the skull might be healed without producing severe symptoms, and without leaving paralysis or impairment of mental powers. These observations did not fail to make an impression upon unprejudiced observers; and accordingly we find at all times some surgeons, at least, opposing the use of the trepan, and relying upon the efforts of nature. Three hundred years ago, Lafranchi, of Milan, said, that in fractures of the skull everything depended upon the assistance of the Holy Ghost, which the surgeon should implore above all things; trephining he found rarely necessary. The healing by nature of depressions of the skull failed to make a lasting impression, because such cases were believed to be rare exceptions. Surgeons went on trephining till they found by experience that in large hospitals recovery after this operation is an exception. It is only within the last twenty or thirty years that a more rational system has been followed, and that the operation of trephining is daily being confined within narrower limits.

The question which now presents itself is, what advantages are offered in a case of compression of the brain by a treatment which leaves the depressed pieces of skull undisturbed in their place? The following may be enumerated: 1. The wounded part is not irritated by a renewed injury. 2. The early congestion of the contused part of the brain, and the formation of extravasations, are avoided. 3. The air does not obtain free entrance to the dura mater, to the sac of the arachnoid, or to the brain. The advantages of subcutaneous wounds are sufficiently known, and will be appreciated with regard to the skull and brain, as well as to other parts.

The author devotes several pages to the description of pyæmic inflammation following wounds of the head. Seeondary encephalitis and ostitis engage the author to sume length. Typhus and delirium tremens wind up the pathology.

Treatment.—Three hundred years ago, Lafranchi established the same limitation of the indications for trephining, which a surgical genius of our days—Dieffenbach—derived a second time from his practice. These principles Dr. Stromeyer found to be correct from his own experience, regarding the fatality of the operation of trephining, and the recovery after considerable depression of the skull without that operation.

Dr. Stromeyer relates a series of cases, from his earliest surgical experience, in the year of the great comet (1811), to the present time. He records his experience during the seven years he devoted to the study of the profession. During three years out of these seven he attended the hospitals at Berlin, Vienna, London, and Paris, and yet he did not meet a single case in which the operation of trephining had been successfully resorted to, while many severe wounds of the skull came under his observation which recovered without any operation. Notwithstanding this, he adhered to the views taught by Dease and Astley Cooper, and supported by Brodie by the aid of statistics from the London hospitals, that in complicated fractures of the skull trephining must be resorted to, because of the threatening formation of pus. Further experience led the author to doubt the correctness of these views, principally because it became apparent to him that the air must exercise a deleterious influence upon a contused part of the brain, no matter whether it be admitted by trephining or by the simple removal of loose fragments of the skull. The latter operation had a very unfavorable issue in a case at Frieburg, in 1848, and in another on the field, in 1849. Cotemporaneously, Professor Langenbeck performed two similar operations at Flensburg, which shortly after terminated fatally.

After the battle of Kolding, in Schleswig (April 23d, 1849), there were eight gun-shot fractures of the skull, with depression, and more or less considerable brain symptoms, in the hospitals at Kolding, Christiansfelde, and Hadersleben. In all these cases, with only one exception, the detachment of the fragments was left to nature. The whole eight patients recovered perfectly. One patient, from whom some fragments were removed on the seventh day, was placed in considerable danger by this treatment. Dr. Stromeyer therefore resolved never to adopt it again. The treatment which brought these eight cases to a favorable issue was neither expectant nor operative, but simply antiphlogistic. Dr. Stromeyer recommended it to the younger surgeons, and had the pleasure of seeing that all depressed gun-shot fractures of the skull from small arms, no matter whether they injure the brain and dura mater or not, may be cured after this plan, without paralysis or interference with the other functions of the brain remaining, even when the state of sopor had lasted for weeks together. In 1850, after the storming of Friedrichstadt, in Schleswig, two young surgeons came under Dr. Stromeyer's care with gun-shot wounds of the head, accompanied by deep depression; they were both subjected to the non-operative treatment. In the first case, no venesection was required; in the second case

* Th. Fr. von Walther, System der Chirurgie, vol. ii, 1847, p. 58, § 93.

life was only preserved by a venesection. Both recovered perfectly. A third case, that of a fusileer, terminated fatally from encephalitis, the surgeon in attendance upon him shunning bloodletting.

From the two campains of 1849 and 1850, Dr. Sromeyer possesses the notes of forty-one gunshot fractures of the skull, with depression, in which there was no doubt about the existence of fracture of the skull, because it was denuded. It is, however, doubtful whether the brain or the dura mater were injured, because this can only be ascertained by the escape of cerebral matter from the wound, or by extracting fragments at an early period. Of these forty-one cases, seven terminated fatally, one from abscess of the liver, one from typhus, two from primary encephalitis througn neglect of antiphlogistic treatment, two from phlebitis encephalica, one from secondary encephalitis, in consequence of the patient visiting a public house. Thirty-four were cured, of whom one had been trephined by Dr. Ross, who afterwards described the case in the 'Deutsche Klinik.' This is the only case of trephining which gave a favorable result in all three compaigns. A soldier was wounded in the head at the storming of Friedrichstadt, and was transported by rail to Altona. He had been doing well for several days, when the acute encephalitis caused Dr. Ross to trephine him. A detached piece of the internal lumina was found under a slightly depressed part of the frontal bone. Notwithstanding the operation, seven venesections and sixty leeches were necessary to combat the continuing inflammation of the brain. It is to this energetic antiphlogistic treatment, and not to trephining, that Dr. Stromeyer attributes the successful termination of the case. The highest number of venesections ever employed by Dr. Stromeyer in cases of gun-shot fracture, when trephining was not performed, was five; this occurred in a single case only, in 1849, when there was no ice to be had. Dr. Ross's case may serve to illustrate the disadvantages which trephining inflicts, even after healing of the wound. His patient, after being cured, was accidentally struck at the trephined place with the end of a whip-lash, or cord, which caused the reappearance of dangerous cerebral symptoms. Two cases in which the operation of trephining was resorted to unnecessarily by Dr. Beck and Dr. Ross, are severely criticised by Dr. Stromeyer, in which, we have no doubt, our readers will fully coincide.

Gun-shot wounds of the head should, in their recent state, be examined with great care by the aid of the finger or the probe alone. They must not at first be dilated, under any pretext whatever, whether for the sake of diagnosis or of prophylactic treatment.

The exclusion of air, the presence of which favors the decomposition of the secretions of the wound, is indicated in all cases. This is best accomplished by a piece of fine linen, when damp, adheres perfectly to the wound, and is to be removed at long intervals only. It is covered by some dry charpie, above which is placed a wet compress; a net made for the purpose fixes the whole dressing. Cold applications are made over the net. When these are discontinued the piece of linen next to the wound is moistened with oil. Every patient with a wound of the head must be watched. The best advice Sir Astley Cooper gives in his Lectures on Wounds of the Head. is to visit a patient suffering from concussion of the brain at least three times a day. In all cases of wounds of the head great care should be taken not to let the right period for venesection pass by. With regard to local treatment, the cautious extraction of perfectly loose fragments and foreign bodies stands foremost. The removal of impacted balls should not be attempted. No fault must be avoided more carefully than that of attempting the extraction of necrosed pieces of bone at too early a period, since it produces no harm whatever to leave them longer than is actually necessary. Small incisions of the wound for the purpose of extraction shsuld not be resorted to before the third week.

These principles are by no means new, nor is it necessary to turn to the declared adversaries of trephining in order to meet with them. Hennen, who in considerable depressions of the skull, trephined only when there were brain symptoms which did not at once yield to depletion of the vessels, says that it was not absolutely necessary to trephine for depressed fragments, though nobody would be hazardous enough to leave fragments which could easily be removed. He mentions the case of a man who, with a funnel-shaped depression one inch and a half deep, lived for thirteen years, and enjoyed a comfortable existence, provided he did not drink too much. Hennen had several specimens of that kind in his possession.

Space does not permit us to repeat the whole of the author's arguments. They necessarily lead to the conclusion that, if depressions of the skull do not in themselves indicate trephining, neither do they so even when, under the influence of reaction, unconsciousness and paralytic symptoms make their appearance. They only indicate those remedies which keep down the reaction, and trephining certainly cannot in the least be said to do this.

Dr. Stromeyer has, on principle, not trephined in two campaigns, and we have seen the results. After the exposition of his reasons, nobody, he hopes, will regard his disuse of trephine merely as an experiment, but will accept it as the necessary result of observation and of correction of preconceived opinions. The strongest corroboration of the author's views regarding the treatment of compound gun-shot fractures of the skull is, perhaps, the statement of Mr. Rose, of the Coldstream Guards, recorded by Sir George Ballingall:—

"On the 3d of August, 1809, six days after

the battle of Talavera, an order was given for all the wounded in hospital at the latter town, who could march, to leave it. Among those who undertook the march there were twelve or fourteen with wounds in the head, accompanied with injuries of the bone. At least four or five of these had both tables of the skull fractured, and two of them, along with fracture of the os frontis, had each the globe of one eye totally destroyed. In none of them had the trephine been applied, nor had any attempt been made to remove splinters of bone. After leaving Talavera they were exposed to very severe fatigue. Every evening, after the day's march, Mr. Rose collected the wounded around him, and examined and washed their wounds, dressing with care those that particularly required it. Cold water was the principal application employed. The retreat occupied sixteen days, in spite of which, and with no other treatment than that which has been described, every one of those which were wounded in the head recovered."

Nine Cases of Placenta Prævia, read before the Obstetric Society of Boston, Nov. 2d, 1861,

By William Read, M.D.,
Secretary of the Society.
[Communicated for the Medical and Surgical Reporter.]

PLACENTA PRÆVIA.

Case 1. Oct. 22, 1843, Mrs. H., P. P., complete occlusion of os uteri; plugging; consultation; interference refused; died undelivered.

Case 2. Oct. 13, 1852, Mrs. McM., primipara; æt. twenty-seven; seven months pregnant; taken with flooding after bringing up stairs a quantity of heavy wood; discharge sudden and profuse; a physician was called, who prescribed ergot; growing worse, I was sent for, but she was moribund, and died in a few minutes after I arrived, undelivered. The children, two boys, were delivered after she died, but they were both dead.

Case 3. Jan. 27, 1856, Mrs. H., aged twenty-two; second pregnancy; patient was delivered artificially at her first labor; first noticed flooding latter part of November, 1855; yielded to rest and anodynes. Returned December 28th. An examination was then made, but nothing definite could be determined as to the presence of the placenta at os uteri, though the case was diagnosed to be that. Slight attacks, at intervals of a few days followed, needing no treatment till January 26, 7, P. M., when labor set in with considerable flooding and dull pains. Os well dilated, but head did not advance very fast. A portion of the placenta was protruding into the vagina, over the post. lip of the os uteri.

January 27, 1½ A.M. Patient becoming so weak that a fatal issue was threatened, and no labor pains of any amount being present, Dr. Storer, Sr., was sent for in consultation. In the meantime the vagina had been plugged with sponge, wet in vinegar and water. Tincture ergot given, with free doses of brandy. There was great restlessness, retching, and disposition to sigh and faint, and much jactitation.

On Dr. Storer's arrival it was determined to turn and deliver, which was accordingly done. Right foot was seized without any trouble, and brought down. The labor was completed in a short time without any trouble, and the child, a boy, born alive. Mother recovered in the usual time, without any bad symptoms.

Case 4. April 22, 1858. Mrs. K., aged twenty-six; P. P., seven and a half months pregnant; was taken with flooding while sitting at work in the P. M. of date. She was seen immediately by her physician, who prescribed ½ gr. of opium every four hours, and ordered her to bed. Being called out of town, he left the case with me. In the course of the evening I was sent for. Os dilatable, but not dilated. Head presented with vertex to the left sacro-iliac syn. A bit of the placenta could be felt at the os, on the posterior lip. Anteriorly the cervix was very thin; so much so that the form of the head could be made out without any difficulty. Pains frequent, but not strong. The examination was not followed by any increase of the flooding. At 8 P. M., one hour later, the flowing had increased, as had the pains also. Patient said she felt somewhat faint, but not weak. Cervix was entirely obliterated. As the head came down the hemorrhage stopped, and the labor was finished without any need of artificial aid. An examination of the membranes showed that they were ruptured by the passage of the head about two inches from the edge of the placenta. The child, a girl, lived two or three days, and died of "trismus nascentium."

Case 5. September 14, 1859. Mrs. T——, aged twenty-seven; fourth pregnancy; seen in consultation with Dr. C. E. Buckingham; patient cannot reckon her time with any certainty. Last child born November 17, 1857; nursed it till middle of April, 1859; menstruated Jan. 18, 1859, Feb. 18th, March 18th, about an

hour, very slightly. From that time to second week in April took various medicines to produce abortion. In one day took one pint (℥ xvj.) of fluid extract cotton, not bark. This brought on severe flowing which continued through the night and next day. Returned occasionally through the whole month. Since then no return till September 8, when slight hemorrhage came on; continued through the 9th and 10th; returned on the 13th, at 5 A. M., with severe pain, and lasted till noon, when it stopped. At this attack patient thinks she lost two quarts of blood, very firmly coagulated. She kept up through the day, but at 7 P. M. was obliged to go to bed. No pain. Flowing steady, but not profuse. Os uteri at first rigid; began to be dilatable at 4 A. M., when version was performed by Dr. B. Child born alive—boy. Child died in five weeks from anæmia. Mother did well. Almost one-eighth of the os uteri ant. was covered by the placenta.

Case 6. June 7, 1860. Mrs. B., aged thirty-two; fifth pregnancy; thinks herself eight months pregnant; May 9th was taken with flooding in the night; ceased spontaneously. Three days afterwards it returned. Ceased in like manner after a free discharge of coagula. There was no pain in either of these attacks. Another return June 3d; I saw her the next morning, when it had diminished very much. Quiet was strictly enjoined, with directions to send upon the return of the flooding. It came on again about 7 o'clock, P. M., of the 6th, and continued more or less through the night. Saw her at 7½, A. M., 7th. Found her sighing and retching constantly; pulse very feeble, but regular; skin cold and covered with a clammy sweat; expression that of extreme exhaustion. Bed full of coagula. Gave her a drachm of tincture opii. in ℥ij. brandy, and proceeded to examine; vagina filled with coagula. Os uteri dilated, and placenta adherent all round. Repeated the laudanum and brandy, and delivered. No resistence to the introduction of the hand was experienced, but the edge of the placenta could not be readily reached, and it was thought best to go through its substance. Through the opening thus made, the feet were seized, and brought down. A smart pain came on and the child was born alive—boy. Placenta came away immediately. It was attached to the whole of the interior of the uterus, except about three inches in diameter at the fundus. After the delivery the pulse became somewhat irregular, but there was no impediment to her speedy recovery. She dates her conception October 4th, 1859, when her husband returned after an absence of many weeks, and when she had been about a fortnight over her menstruation. May not the cause of the placenta prævia in this case be found in this late conception; the ovum having been impregnated just as it was leaving the uterus, and arrested by this, at the os uteri, began to form the placenta there. This case is proof also, to a certain extent, in favor of the idea that in complete placenta prævia flooding does not come on so soon as in partial attachment of this organ over the os uteri. Duration of pregnancy from coitus 246 days—35 weeks, 1 day.

Case 7. Feb. 13, 1861. Mrs. C. Last menstruated June, 1859. First attack of flowing about a fortnight before date, but which ceased without any assistance. Yesterday (12th) it came on again, after a hard day's work at the ironing table. Her attending physician, Dr. J. P. Reynolds, was sent for at 4 A. M. The flooding was then very severe, and the placenta was adherent all round the os uteri. I was sent for, in consultation, but before I could reach the house, the hemorrhage increased so much, that it became necessary to deliver, which was done by version, without any difficulty, after the placenta had been detached and extracted. The child was a girl, and was still-born. The funis was thirteen inches only in length, very bulky, and gelatinous. The placenta was small. The mother did well.

Case 8. March 10, 1861. Mrs. M., æt. 35; third pregnancy; last menstruation, as patient thinks, last week in May, 1860. Has always been irregular; sometimes as often as once in two weeks. Had a slight attack of hemorrhage July 5th, 1860. February 16th, felt a good deal of pain, and thought she was in labor. Passed off in about twenty-four hours.

February 27th, began to flow at 7¾ A. M., accompanied with pain. As the pains became strong the hemorrhage ceased. I was sent for, and at 9½ A. M. made an examination per vaginam, which I found full of coagula. The cervix was soft, and not much shortened, but the exact nature of the case could not be decided, from the examination. Taken in connection with the quaggy feel of the cervix, the flooding appeared to indicate placenta prævia. From this time till March 10th, she suffered but little pain, although she had repeated attacks of

slight flowing as often as once in forty-eight hours.

This morning (10th) she was waked up at 2 o'clock, by flowing, accompanied with some pain. I saw her at 2½ A. M. She was flowing freely, but had no pain; os dilatable, and entirely covered by the placenta; strength very sensibly effected by the loss of blood. The condition of the os was favorable to delivery, and the absence of pain gave little hope that the labor could be completed naturally, I therefore decided to turn and deliver her, without waiting any longer. The fingers were introduced, one by one, into the os, and the placenta peeled off, to get at the membranes. This took place to the extent of four inches, before they could be reached, which they at last were in front, when they were perforated, the right foot seized, brought down, and firmly held. Just before the version was begun, a full dose of tr. ergot, in whiskey, was administered, which had the effect to bring on pains, although they were neither strong or forcing. Traction was kept up steadily, but, in consideration of the enfeebled state of the mother, no haste was used, and in about twenty minutes the child was born. Boy; dead. There were no pulsations in the cord from the time it was first felt, when the abdomen came out. Mother had a good, but not very rapid recovery.

Case 9. Oct. 31, 1861. Mrs. C., æt. 28; fourth pregnancy. Thinks she is at the end of her pregnancy. Has been flowing more or less for the last three months, with intervals of a few days. When first seen, began to feel the effect of the hemorrhage quite sensibly; was sighing and restless; vagina filled with coagula; placenta covering about two-thirds of the os uteri, on the upper left side; head presenting; pains good for nothing. The hemorrhage showing a tendency to increase, and the condition of the patient being as yet not essentially enfeebled, and nothing apparently to be gained by delay, I gave her ʒi. of tr. ergot in a glass of brandy and water, and proceeded to turn and deliver. The membranes were ruptured, the left foot seized and brought down, and the child was soon extracted, alive. Placenta came away immediately, the uterus contracted well, and the mother recovered in her usual time.

In the examination to ascertain the presentation, there was noticed a condition of the parts that often occurs in cases of placenta prævia, at least. The upper portion of the vagina seems swelled and distended, like a bladder, to such an extent that its walls can hardly be reached, while the os uteri is high out of touch, without introducing the whole hand, except the thumb, which I did in this instance.

Dr. R. Lee makes special notice of this mode of examination, and insists on it, under certain conditions, rather than that there should be any uncertainty as to the state of the os uteri. This case is also corroborative of the assumption, already referred to, that in partial presentation of the placenta, there is both earlier and more abundant hemorrhage, than in those cases where the occlusion of the os is complete.

Case of Rupture of the Bladder, treated by Abdominal Section.

By A. G. Walter, M.D.,
Of Pittsburgh, Pa.

John Bohland, 22 years of age, blacksmith by trade, of healthy constitution and strong muscular development, was kicked during a fight, on the lower part of the abdomen, on January 12, 1859. Immediately on receipt of the injury, he became weak and faintish, complaining of violent pain in the region of the bladder. Some hours later, being called on to see him, I found the following condition of the patient. The abdomen, without showing any marks of external violence was somewhat swollen and exquisitely tender to the touch, more particularly over the pubis, where the injury had been received. His pulse was quick and small, skin cool, respiration short and rapid, incessant were the painful calls at micturition with inability to discharge urine. There were vomituritions and vomiting, at first the contents of the stomach, afterwards a slimy bilious fluid was ejected. On the introduction of a catheter, some bloody urine was drawn off without any relief of the abdominal pains, or the constant urging calls to make water. These being the symptoms, no doubt was entertained that the bladder had been ruptured by the violent blow from the point of the foot, and that urine had extravasated in a large quantity into the abdominal cavity (the patient having been in the habit of retaining his urine for a long time, and in the present instance for more than six hours.) Three grains of opium were given at once, and one grain doses every half hour,

till relief of pain was obtained, along with stupes of warm chamomile tea to the abdomen, the abdominal walls being kept relaxed by supporting the lower limbs in a bent position. A gum elastic catheter was introduced into the bladder and retained, to which an elastic tube was attached, with a bottle for the reception of the urine. His thirst was quenched with pieces of ice, no fluids as drinks being permitted, for the purpose of giving rest to the bladder, by denying liquid materials to pass into it from the kidneys. Some hours later, no mitigation of the painful symptoms being produced, sickness, vomiting, thirst and distressing calls to urinate persisting, tenderness and pain increasing all over the abdomen with tympanitis, and no urine passing by the catheter,—there being no remedial agents in our possession for removing the extravasated urine in the abdominal cavity, without which recovery was out of question—the propriety of *opening the abdomen* pressed itself upon our mind with a hope of success not otherwise to be obtained. In consultation with some medical friends, the novelty of the proposed proceeding, with its probably hazardous consequences, did not find encouragement, and we were left to rest on our own responsibility in choosing a plan of treatment which at least offered a prospect of success, when otherwise the case was sure to end fatally. Advised of the imminent danger of the case, and its certainly destructive tendency, the patient willingly consented to have abdominal section made for the removal of the poisonous urine. Ten hours after the receipt of the injury, assisted by Dr. Guenste, chloroformisation having been induced, the abdomen was opened in the linea alba by an incision, beginning one inch below the umbilicus, and terminating about one inch above the pubes to the extent of six inches. The intestines were found inflated, their peritoneal coat, as well as that lining the interior of the abdominal walls alréady showing evident marks of congestion. A soft sponge then was cautiously introduced into the abdomen, with which the extravasated fluid, consisting of urine and blood, was carefully removed from the pelvis, and between the convolutions of the bowels, amounting to near a pint. While thus inspecting the abdominal cavity, a rent was found in the fundus of the bladder of two inches extent, through which the urine had escaped. The cavity of the abdomen being cleansed of the noxious agent, the wound of the bladder was left to itself, as no urine was seen to escape from it. The abdominal wound was closed by strong Carlsbad needles secured by silver wire (only skin and fascia being stitched, while the peritoneum was left untouched.) A flannel bandage encircled the whole abdomen. The patient awakening out of the anæsthetic sleep, felt relieved of pain and desire to urinate, so distressing before the operation. Vomiting did not return. Opium again in one grain doses every hour, was ordered. Abstinence of drink and perfect quietude of body, with retention of the catheter, were strictly insisted upon. He soon began to doze, had a comfortable night, was free of pain the next morning, complaining only of soreness in the abdomen, without tympanites, sickness, or calls to urinate, thirst less urgent. The treatment being vigorously continued, for drinks, iced barley water only in very small quantities, with pieces of ice being allowed, no unpleasant symptom followed, urine in small quantities, but free of the admixture of blood passing by the catheter. On the third day, the intervals between the doses of opium were lengthened to two hours, on the fifth to three, and thus gradually decreased, as all signs of inflammation had passed, the pulse though yet quick, having lost its wiry condition. At the expiration of a week, the abdominal wound appeared to be closed by first intention, the stitches however were not removed till a week later. The gum elastic catheter was replaced by a new one every two days, and was not withdrawn for two weeks after the injury had been received, and then only for a short time. At the expiration of two weeks, with the absence of all pain and tenderness, opium was omitted. The intestines were relieved by warm water injections on the tenth day, when mild nourishment was ordered. Between the second and third week the catheter was permanently withdrawn, and only introduced every four hours for the evacuation of the urine. After the third week, the patient left his bed, feeling restored to health, and drawing off his urine himself every four hours. He has remained well ever since, working at his trade, and feeling no impediment in his urinary organs.

Recovery from an injury of such a formidable character as rupture of the bladder with extravasation of urine into the abdominal cavity, has not, as far as we know, ever been obtained by the ordinary means of practice. The urine, composed of excrementitious matter, possesses

such noxious properties when coming in contact with living tissues, as not only to light up a high degree of inflammation, but to poison the blood and destroy its vitality.

Having succeeded by a practice, though *novel* in this particular instance, in rescuing a patient from certain death, we do not feel any hesitancy of urging it upon the attention of surgeons, as not only a legitimate, but imperative one, all other means hitherto proposed and practiced having been found of no avail. By the abdominal section, the extravasated urine being removed from the peritoneal cavity, the injury is reduced to a lesser grade of danger. Inflammatory action of the peritoneum alone has to be combatted, easily yielding to the prompt and energetic administration of anodynes, cautiously, yet unremittingly persevered in till every trace of phlogosis has passed away. Gastronomia, however, will fail of success if delayed till uræmia, with its fearful consequences, has taken place. To preserve a patient's life under these circumstances, it must be resorted to at once, as without it the efforts of nature and the resources of science are powerless in affording relief. Yet by forming an outlet for the extravasated urine through the abdominal parietes, by guarding the nervous system from feeling the shock of the primary injury, and the operation by the timely and energetic use of hypnotics, closure of both wounds will follow kindly, certainly, and speedily, even under otherwise unfavorable conditions of the patient. Novel, though, and hazardous as the treatment before detailed may appear, it is nevertheless justified by the dangerous consequences of the primary injury, and recommends itself strongly to the consideration of surgeons.

———o———

Safety in the use of Poisons for Animals.—M. Sevérin Caussé has, under direction of the French government, been devising a method of poisoning noxious animals, in which safety from accident can be insured. It is essential that the poison should not be used in a form by which it could be mistaken for food, and must be repugnant to human taste, but not to that of animals. The substance should be of an emetic character, so that, if accidentally swallowed, vomiting would be prodnced, and it should be a material which could readily be detected by chemical analysis.

The composition recommended for safety and efficiency, consists of tallow, 786 grains, tartar emetic, 153 grains, and euphorbium 51 grains. It does not produce emesis in the gnawing animals, as in rats and mice.

Illustrations of Hospital Practice.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC.

Service of Dr. S. D. Gross.

October 30, 1861.

APOPLEXY OF THE EYE.

This was the case of a man, 37 years of age, who presented himself with an affection of the left eye, which came upon him suddenly, on Tuesday week, as he was stamping the baker's name upon crackers. He has been a police officer, and about one year ago got several blows over that eye. The pupil is insensible to light; sees better sideways than straight forward. There is here an extravasation of blood between the retina and the choroid membrane, producing what in another locality would be termed apoplexy. It is an apoplexy of the eye. The extravasation is not large, but sufficient to produce a bulging out of the choroid coat. There is no inflammation; there is no heat or redness of the parts; he has had little headache, and there is no constitutional disturbance.

In the treatment of this case, the eye should be kept at rest, and when the patient is recumbent, his head and shoulders should be raised. His diet should be light, farinaceous; should be bled to syncope, and his bowels should be kept soluble. Give him for that purpose, or as a purge, ten grains of calomel, and ten of compound powder of jalap, to be taken at evening. The absorbents must be called into requisition to carry away this accumulated mass, and hence small doses of mercury, carried to the point of ptyalism, may be given with a view to the sorbefacient effect.

November 6.

ANCHYLOSIS OF KNEE JOINT.

Henry M., 22 years of age; general health good; has anchylosis of left knee joint, the leg being nearly at a right angle with the femur, the result of an injury to the knee. Anchylosis may be complete or incomplete, ligamentous, fibrous, or osseous, and results sometimes from disease of surrounding parts, sometimes from affection of the joints themselves, and more frequently from serious injury, followed by inflammation. The changes which hence occur are the same as in the formation of bone or callus. Plastic matter, or lymph, is thrown out, which in a little time becomes organized, uniting the parts more or less firmly together. In this case the union is complete, the cartilage and synovial membrane are lost, a deposition of osseous or bony matter has taken place, uniting firmly both the bones of the leg and the patella.

In the treatment of affections which may result in anchylosis, proper care should be taken to prevent adhesions, and for this purpose the joint should be bent and extended with a gentle degree of force, with sufficient frequency and persistence to effect

the desired object. Passive motion should be made, but if anchylosis must be the result, the limb should not be allowed to assume any position the patient may choose, but that in which it will be most useful.

The method of operation which I shall adopt in this case will be the subcutaneous one, and essentially that performed by Dr. Brainard, of Chicago, in 1860. It consists in making a small incision through the skin, from a half to three-fourths of an inch in length, obliquely, arcoss the united joint, and introducing an instrument prepared for the purpose, passing it in different directions through the joint, with a view to destroy the union which has taken place. After these adhesions are sufficiently broken up, force will be used in flexing and extending the limb. The operation just named is a modification of that performed by Dr. Barton, in 1826, for anchylosis of the hip, which consisted of a free incision down to the bone, sawing out a V shaped piece, and employing frequent motion so as to establish a false joint. This was a hazardous operation. That proposed in this case is by no means so dangerous, and, with proper care to prevent the advent of inflammatory action, may be considered safe. Constitutional disturbance should be carefully guarded against, by regulating the diet, the administration of purgatives, and the exhibition of anodynes, if necessary to allay pain or procure rest.

The patient being placed under the influence of chloroform, the operation above suggested was performed. The adhesions were found to be exceedingly firm, but were finally overcome, and the limb nearly straightened. No constitutional disturbance occurred, and the case was reported from time to time as doing well.

Saturday, November 9, 1861.

CONGENITAL UMBILICAL HERNIA.

J. C., 10 years of age, from Bucks county, in this State, was presented for umbilical hernia. The tumor presents a conical, pedunculated appearance; subcutaneous veins somewhat enlarged; skin of a bluish cast, abraded in those portions where it comes in contact with the abdomen, giving it the appearance of a mucous surface. Does not enlarge after eating, nor does it become harder when costive; has a doughy feel, or that of a fatty mass, inelastic, flabby, somewhat unequal to the touch, which renders it safe to assume that its contents are omentum, and that the intestine is not included. It is irreducible. Attempts have been made to reduce it, but without success; the opening in the abdominal walls is small; the parts are incarcerated within the coverings of the tumor, which are as in all cases of hernia, skin, superficial fascia, peritoneal sac. This hernia is congenital, and had the proper attention been given to it, in the early stage of its appearance, might have been reduced, and radically cured. The remedies then required were a simple pad or truss, giving sufficient pressure to retain the omentum from protrusion. The remedy now required is excision, and yet, if excised, peritonitis might follow, but probably not; no fears need be entertained of it. The adhesions around the opening should not be broken up, but left so as to form a plug, which would fill the aperture. The palliative means are a suspensory bag, to prevent further dragging down.

RUPIA SYPHILITICA.

Mr. B., 45 years of age, laborer; has ulcers of nine years standing upon the upper portion of the fore arm, just below the elbow. They are oval in form, superficial, encrusted with cacoplastic or devitalized matter, exhibiting no appearance of healthy granulations. These ulcers are the result of a specific poison. Occasionally they heal up. A crust or scab forms over them, but the poison still works underneath, and breaks out again with more violence. Why they should attack one part of the body, and not another, cannot be determined; perhaps there is an electric affinity between such poison and some portions of the system, but this is conjecture. The prognosis in this case is favorable, especially inasmuch as this man has not probably taken mercury; had he taken it, his case would no doubt have been greatly aggravated, for, so far as my observation goes, the use of mercury serves to develop instead of arrest the disease; to disseminate it through the system, instead of eliminating it from it. The treatment to be pursued here is the administration of iodide of potash, (which I believe to be a specific in this disease, as much as quinine is a specific for intermittents,) in combination with bi-chloride of mercury, not given to complete ptyalism, but so as to affect the gums slightly. How this combination operates, whether by eliminating the poison from the system, or neutralizing its effects, I cannot say. Suffice it that the disease ordinarily yields to the treatment. His diet should be simple, plain, and he should refrain from using the arm in labor. If he needs purging, give him blue mass, with extract colocynth, q. s. As a local application to the ulcers, to promote healthy granulations, and to promote healing process, apply acid nitrate of mercury, diluted one to six.

PENNSYLVANIA HOSPITAL.

Nov. 6, 1861.

MEDICAL CLINIC.

Service of Dr. Gerhard.

ANASARCA.

This was the case of a man, fifty-three years of age; carpenter; temperate; calls himself healthy up to six weeks ago; then taken suddenly with dyspnœa; admitted to hospital Oct. 29; complexion dull, almost straw color in appearance; had œdema of feet three or four weeks before admission. This man has what is denominated anasarca, or dropsical effusion, which is not, in my view, a disease any more than the expectoration in pneumonia; it is a symptom, and only indicative of serious lesion of important organs of the body, heart, kidneys, liver,

it may be. In cases of this character, the capillary circulation is enfeebled; the pulse becomes irregularly regular, beating a few times in regular rhythm, then intermitting. This may be caused by disease of valves, but not always; some will go on through life with this irregularity, and in some cases of children, irregular rhythm of pulse will be exhibited, which will become normal on convalescence. Proceeding, then, to a more careful examination of the case before you, we find feeble impulsion of the heart, as indicated by the pulse; percussion over the præcordial region dull, arising, no doubt, partly from effusion into the pericardium; the heart is much hypertrophied, as shown by the extent of the dullness in percussion; upon auscultation we observe the sounds of the heart are feeble, irregular, and some of them slightly roughened; that is, there is a double bellows murmer at the mitral valves, in both contraction and dilatation. In the semi-lunar valves of aorta, the systolic sound is roughened. In the lungs the sonorous and mucous rhonchus are heard in both expiration and inspiration; percussion dull. The liver is enlarged, dipping down to two and a half inches beyond its normal situation; the left lobe is more obviously enlarged than the right; the alvine evacuations are pale, clay colored, which is another evidence of disease of this organ; this may not be permanent. The spleen is normal; the abdomen is dull on percussion over its whole extent, and we observe fluctuation. There is then in this case effusion into the pericardium and right plura, none in the left (for the plura is adherent upon that side,) and also a considerable quantity in the abdomen; there is also disease of the mitral and semilunar valves of the heart, with hypertrophy, while the liver is also hypertrophied.

The prognosis is unfavorable. The treatment should have reference to the dropsy, to the disease of the heart, and to the general health. For the first diuretics and purgatives, with mercurials. Give him:

Hyd. chlo. mit.,	gr. 1-12.	
Pulv. digitalis,	" j.	
Pulv. scillæ,	" ij.	M.

Three times a day.

For the latter, give:

Ext. cinchonæ fluid,	- f℥j.	
Pulv. ferri,	- gr. j.	M.

Three or four times a day.

His diet should be nourishing, and his bowels should be kept open.

——o——

It is recorded of the late Prof. Queket, that during the twenty-two years which he devoted to labors in the Museum of Lincoln's-inn-fields, he made over 16,000 microscopical preparations. He entirely created one department in the College of Surgeons, the Histological collection. His salary was never large, and he leaves his family in an unpleasant pecuniary position. An effort is made to have one-half of the salary he received during his life continued to his widow.

Medical Societies.

VERMONT MEDICAL SOCIETY.

This Society held its annual meeting in the State House, on the 16th and 17th ult. In absence of the President, the meeting was called to order by the Secretary, Dr. McCollom, of Woodstock, and Dr. Stiles, of Windsor, was appointed President, *pro tem.* The record of the semi-annual meeting having been read and approved, and a committee appointed to examine candidates for membership, the following gentlemen were elected members:—Drs. Charles S. Downs, Topsham; E. F. Upham, West Randolph; M. J. Hyde, Isle La Motte; C. F. Hawley, Fairfax; J. E. Macomber, Worcester; E. S. Blanchard, Hyde Park; G. W. Hunt, New Haven.

The officers elected for the ensuing year were:—A. T. Woodward, Brandon, *President;* H. S. Brown, St. Johnsbury, *Vice President;* Wm. McCollom, Woodstock, *Recording Secretary;* C. B. Chandler, Montpelier, *Corresponding Secretary;* Chas. Clark, Montpelier, *Treasurer;* H. F. Stevens, St. Albans, Joseph Perkins, Castleton, J. N. Stiles, Windsor, *Committee on Printing;* J. N. Stiles, Jos. Perkins, E. Hazen, *Business Committee;* J. N. Stiles, H. S. Brown, *Delegates to Castleton Medical College;* M. Love, Bennington, W. H. H. Richardson, Montpelier, *Delegates to Burlington Medical College.*

Drs. Morgan of Pownal, Chandler of St. Albans, and Richardson of Montpelier, were constituted a Committee to confer with the Executive in reference to the appointment of a Medical Board for the examination of candidates for the office of surgeon in volunteer regiments.

Instruments of new construction were exhibited by Dr. Bradford, of Northfield; also, by Dr. Branch, of St. Albans.

Dr. Keith presented a paper on Retention of the Placenta, which elicited much interesting discussion from Drs. Stevens, Woodward, Stiles, Bradford, and others.

Dr. Brush read a paper upon Diphtheria, and cases were reported by many of the members. Four or five hours were devoted to the discussion of this disease. Drs. Woodward, Marsh, Keith, Hazen, McCollom, Bradford, and others, participated. Drs. Woodward and Bradford strongly advocated the use of calomel in this disease, which doctrine was strenuously opposed by nearly every member present.

A Committee was appointed to investigate and report upon this subject at the next semi-annual meeting.

This meeting was one of unusual interest, the attendance greater than has been known for years, and a spirit of investigation exhibited and zeal awakened that will accompany members to their respective fields of practice, and result in much good to the communities upon which are bestowed the labors of this self-denying class of men.

The semi-annual meeting will be held in St. Albans, on Wednesday and Thursday following the commencement of the Medical Colleges, in June next.

EDITORIAL DEPARTMENT.

PERISCOPE.

Summary of Papers contained in the Transactions of the American Medical Association, Vol. 13th, 1860.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

This volume, containing the papers brought out by the *American Medical Association* in 1860, is one of magnitude, as to bulk, and one which we are in hopes to find rich in practical interest. It contains 930 pages, printed on good paper, with good type, with occasional illustrations, and, excepting an occasional typographical error, every way presenting a respectable appearance. The *American Medical Association* is the most influential body of associated physicians in this country, and its published transactions are worthy of study.

Following the minutes of the meeting, and the very able address of the retiring President, Henry Miller, is a *Report on the Medical Topography and Epidemics of the State of New York*, by Joseph M. Smith, M. D. This report is quite voluminous, containing very nearly *two hundred* pages. The geography, hydrography, geology, mineralogy, flora, fauna, meteorology, and ethnography, of the State of New York, are considered. As the design of our notice compasses subjects only which are immediately practical, and as our space will admit only of the introduction of such, we shall pass to and make a few remarks upon the subject of Epidemics.

Epidemics are divided—1st, into those which are contagious; 2d, those which are infectious; and 3d, those which are mateoratious.

The principal diseases in the first class are small-pox, measles, and scarlatina. Each of these diseases, he thinks it is unquestionable, arise occasionally spontaneously. He reports three cases of small-pox, supposed to be of this character, occurring in the State of New York, and reference is made to two other cases, one occurring in Pennsylvania, and the other in Illinois.

The geographical and geological relations of the epidemics of New York State are fully described. The extreme southwest portions of the State are omitted, upon which we shall make a few remarks. Chautauque county is bounded on the north by Lake Erie, and on the west and South by the State of Pennsylvania. Though the extreme north is quite level, the Lake Erie basin here presents but a narrow belt, and the elevation over rocky escarpments is quite abrupt to the elevated table lands, but eight or ten miles south. This elevation runs nearly parallel with the lake shore, and the central and southern portions of the country are rough and broken. The slope to the south is quite gradual. The elevation of Lake Erie is about 565 feet. Chautauque lake, which, in its northwestern extremity, reaches to within about twelve miles of Lake Erie, and situated upon table lands just referred to, is at least 730 feet higher, making an elevation of 1295 feet above the level of the sea. The elevation of the surrounding hills, whose waters contribute to form the beautiful lake, are, on an average, perhaps, 250 feet higher still. Hence it will be seen that the northern slope, from this elevation to Lake Erie, is so abrupt as to descend nearly a thousand feet, in some points, in the distance of eight or ten miles. The Chautauque Lake stretches away southeasterly for twenty miles, and its outlet, joining with other small streams that originate in elevated swamps farther east, empty into Allegheny river about twenty-two miles further south. At the extreme north the Devonian slate crops out upon the surface. Chautauque Lake has generally bold and dry borders, excepting near its southeastern extremity, where it presents a narrow border of low and swampy land. The foundation of this belt of rolling table land is Devonian sandstone and slate. On the elevations in the extreme south of the county we find the final northern outcroppings of the conglomerate rock. A few miles further south, and in the State of Pennsylvania, we reach the great coal basin, which stretches away southwesterly until it terminates in Tennessee. It is in this coal basin, or rather in the conglomerate rock that forms its basis, that recently rock oil (petroleum) has been found so abundantly. The outlet of the Chautauque Lake descends quite rapidly for a short distance, and then empties into the Conewango creek. This stream runs through a broad and rich valley, which, to a great extent, it annually overflows, until within about six or eight miles of its termination in the Allegheny river, where the hills crowd down on either hand, and terminate in high and steep bluffs. The broad valley above referred to shows conclusively that it was once the head of a lake connected with the Chautauque, at a little lower level. This lake is now drained, and this now dry lacustrian bed forms the remarkably rich and cultivatable lands of this locality.

The low and swampy lands immediately bordering the Conewango, and frequently overflowed by this stream, as well as the swampy origin of streams farther east, at first sight, it would be supposed, would be prolific in the development of miasmatic fevers, but such is not the case. Our field of practice, for the last five years, has been in the bed of this obsolete lake, and along the adjacent hills, and we never saw a case of intermittent fever that originated here. In the extreme north of the county, about the marshes of the shores of Lake Erie, malarial fevers are developed. Upon the elevated lands referred to above, our fevers are mostly of a continued type. Epidemics of this fever occasionally occur, also of diphtheria, erysipelas, dysentery, and influenza. Pneumonia is a common disease of the winter and spring, and occasionally seems to partake of the characters of an epidemic.

Returning now to the paper of Dr. Smith, from which we have made a digression, we make the following quotation in regard to periodical fevers:—"In the survey which has now been made in the districts and localities in the State of New York, in which periodical fevers prevail, it will be observed that the topographical and meteorological condi-

tions in which they occur are, for the most part, the same as those in which they prevail in the more southern latitudes. It is, however, noticeable that the intermittents and remittents in this State are less disposed to assume a pernicious or congestive form, and what is no less noteworthy, the malaria does not so generally induce visceral enlargements, nor the sallow hue of the countenance and cachectic condition of the system so frequently observed in southern miasmatic countries. Individuals, however, who suffer from ague in this State, are not entirely exempt from these malarious affections. In the sketch we have given of the periodical fevers which are due to malaria, there would be a notable defect were we not to notice one of the more common and severer forms which those diseases sometimes assume. We refer to dysentery. Though frequently occurring in situations where malaria does not exist, it is usually prevalent in the summer and autumn in miasmatic localities, where intermittents and remittents are rife, and of which it may be justly regarded as a modification. These diseases, occurring contemporaneously in the same locality, and being convertible into one another, are manifestly produced by the same efficient or malarious cause. Now, the source from which fever, whether originating from malaria or any other cause, derives its dysenteric form, is manifestly a peculiar variety of atmospheric influence, or what we denominate *epidemic* meteoration, an influence which, varying in its properties in different years, varies the diathesis and phases of popular diseases." . . . . . "In concluding our researches concerning the periodical fevers of New York, we cannot forbear expressing the conviction, which has been strengthened at every advance made in surveying the malarious localities which so extensively checker the territory of the State, that very many of these might, by a right system of drainage, be brought into a condition incompatible with the generation of the endemic cause of fever. That such a change could be effected, to a great extent, under the direction of a State Sanitary Commission, and a corps of engineers provided with ample funds for the purpose; and that such an outlay would be more than repaid directly by the general improvement and security of the public health, and, indirectly, by adding to the vital force employed in enhancing the wealth of the State, there is no reasonable doubts."

Dr. Smith quotes Dr. Ludlow as saying: "If the waters of fresh marshes are largely combined with salt water, or *vice versa*, the general healthiness of the situation will be improved." Dr. Ludlow further says that "it is a singular fact, the boilers of salt are generally free from these (periodical) fevers," though the locality may be unhealthy. This would of course be expected, for it has been shown many times, on trial, that common salt is capable, when taken, of curing intermittent fevers.

Dr. Smith, though he does not remark upon the treatment of periodical fevers, incidentally quotes authorities showing that intermittent or remittent fever had occasionally occurred in the State of New York, as an epidemic, in such a form, that quinine was injurious, rather than beneficial, in the early stages, before the system was prepared for it. Such cases we have never seen, and confess to a scepticism in that regard. We think there may have been a mistake in diagnosis, or the trial of quinine may have been made at an inopportune time. Inflammatory fevers are occasionally mistaken for malarial, and, even in purely malarial cases, the administration of quinine has been delayed until the case has been complicated with local inflammations. We believe that quinine, in proper doses, well timed, and appropriately combined, if need be, with other medicines, to meet the requirements of the peculiarities of the case in hand, is competent to counteract the influences which produce malarial or miasmatic fevers. A genuine case of intermittent is easier, and better for the patient, cured on the first or second, than on the tenth or fifteenth day, the quinine, in the last instance, preceded by, however, much preparatory treatment. A remittent, if seen early, may be as promptly cured, premising only a bleeding before the curative means, (and we are not quite sure but even the bleeding may be omitted,) providing the quinine be given in about double the dose required in a simple ague, combined with morphine and veratrum in tolerable full doses.

Of *Yellow Fever*, Dr. Smith it is generally admitted "that the *materies morbi* of the disease is a specific malignant *koino-miasmatic* poison, and consequently that the disease, in its nature, is *sui generis*. This view of yellow fever is directly opposed to the once popular doctrine that the distemper was due to a contagious principle, generated within the living human body, and communicable from one individual to another." That the disease is not communicable from one to another by the strict laws of contagion, and that it can only be produced under a certain combination of circumstances having atmospheric and terrene dependencies, we have endeavared to show on a former occasion. (See the *North American Medico-Chirurgical Review*, for Jan., 1861.)

Typhus Fever Dr. Smith regards as an *idio-miasmatic* fever, produced by the inhalation of an *idio-miasmatic* poison. *Typhoid* he regards as a *secondary or modified typhus*. "In this view of the subject, it is seen that the several conditions of fever, induced by the introduction of idio-miasma into the blood by breathing, and by the poison spontaneously generated in the system in low fevers, are virtually identical. In like manner, it is seen that malignant puerperal fever, hospital erysipelas, and hospital gangrene, are modifications of typhus. These various forms of disease constitute a group of cognate affections, which are as nearly the same as are the affections which form the group of koino-miasmatic fevers, such as the various types of intermiitent and remittent fevers and dysentery."

Dr. Smith, as was advanced by Prof. Austin Flint several years ago, believes in the possibility of a mixed form of fever, partaking both of the nature of a periodical and continued fever. Such he calls *idio-koino-miasmatic, or compound fever*, and are produced by the combined influence of those causes which produce intermittent and typhus, or typhoid fevers, respectively.

The subjects of *iufluenza, pneumonia, typhoids*, and *diphtheria*, are respectively considered. In the last mentioned, he departs from the general rule of his paper and makes a few remarks upon treutment. We quote the following: "In regard to diphtheria it is sufficient to say that, considered as a zymatic

disease of an asthenic character complicated with a peculiar affection of the throat; the leading remedies are a nutritious diet, tonics and stimulants, as beef tea, sulphate of quinine, the liquid preparations of iron, and wine whey, &c., with chlorate of potassa, used as a gargle, and administered internally, and sometimes the application of hydrochloric acid, or a solution of nitrate of silver, or alum, to the diseased parts of the mucous membrane of the throat which are not covered by the pellicular exudation."

Cholera is next considered. Under some circumstances he regards it a contagious disease, but oftener produced by atmospheric and terrene conditions. "In this view of the modes in which cholera is diffused, we are led to regard the great majority of cases as immediately referable to the epidemic atmospheric influence, and also all the concomitant cases of choleraic diarrhœa and dysentery, and that a minority only springs from contagion." Had he said the disease was *never* propagated by contagion, we think he would have been nearer the truth. We believe certain causative conditions are necessary for the development of cholera, and without them it is as much impossible to develop this disease in its genuine form, as to develop an ague without an exposure to the peculiar conditions, which give rise to this last named disease. If a patient takes the cholera in a locality where this disease is prevailing, and is removed to a remote and healthy locality, he cannot, in this locality, become the focus and cause of new attacks." Dr. Smith's paper concludes with a few remarks upon *erysipelas;* containing nothing peculiar, we shall omit further mention.

Taken as a whole that paper contains many facts, but it is not as rich in practical influences as we had hoped to find it. It is made largely of extracts, and it is not always easy to arrive at the author's own opinions. The subject of treatment is almost entirely omitted, also the philosophy which governs, and the *real essence* of the causative elements, which produce this class of diseases are omitted. We are led to infer that we may expect from him another paper upon this subject, and in this continuance we shall expect to see the deficiencies supplied.

The next paper in order, is a *Report on the Medical Topography and Epidemics of North Crrolina*, by James H. Dickson. Mr. Dickson's paper differs materially from that of Dr. Smith ——, less full in the topographical, geological, and other terrene relations of epidemics, it is much fuller in practical experiences and therapeutical suggestions. We have not the space at command to give the treatment of the diseases respectively, in detail, but we shall endeavor to give the more important opinions of this character.

Fevers, of an *intermittent* and *remittent* type, are first considered. They prevail annually in various portions of the State—near the sea coast and along the valleys of its many rivers—the highlands are only exempt. A mild remittent Dr. Dickson would treat thus: He would commence by giving a cathartic at bedtime, composed of ten grains each of calomel and rhubarb. When the fever declines, which will usually take place a little past midnight, he gives from ten to twenty grains of quinine at once. By these means the bowels are moved in the morning, and the patient every way improved. Doses of five or six grains are now given every three or four hours, until the period of the next paroxysm is past. If there is much irritability of the stomach, opium or morphine is added to the quinine. We should have said that local pains and distress are relieved by local bleedings with cups or leeches. By these means he says he has *in a day* arrested many hundred cases of remittent fever. He repeats the mercurial alterative in smaller doses every night for two or three nights more, and follows in the morning with eight or ten grains of quinine, or twenty-five drops of oil of turpentine. We suppose he would continue the quinine, at intervals, for some time longer, though he does not say so.

We think he is unnecessarily flush with quinine.

In moderately severe cases, from ten to fifteen grains of quinine, properly qualified, if given three or four hours before the expected paroxysm will, in ninety-nine cases in a hundred, arrest the disease; and one dose of six or eight grains every morning for a week, and then once a week for six or eight weeks more, render the cure complete. Intermittents and remittents ordinarily occur in daily paroxysms, and the *specific* treatment is not required oftener, and then the dose should be given about four hours before the commencement of that paroxysm, and be large enough to supercede it.

In adynamic cases, Dr. Dickson speaks highly of turpentine. In such cases, he says, it is more suitable than quinine, and is better tolerated. It should be given every three or four hours, and in doses of from ten to twenty drops, and continued until it produces its peculiar intoxication or strangury.

In cases of great gravity, where the patient is liable to die in the first or second paroxysm, he administers quinine and capsicum by injection, and applies blisters to the epigastrium and along the spine. After reaction, the case is treated as if a simple one. He says, "I have never seen a chill or cold stage recur after forty grains of Farr's quinine has been retained."

Typhoid fever is next considered; it prevails in many portions of the State as an epidemic, and in some localities it has seemed to supercede the intermittent and remittent forms of disease. In regard to treatment, we are disposed to quote a few remarks which the author gives from Dr. Whitehead of that State. In a certain severe epidemic, Dr. Whitehead says: "the treatment at first adopted was in the first stage, minute doses of mercury, opium, and ipecac., with saline diaphoretics; quinine during the remissions, and Dover's powder at night to procure sleep. In the second and last stages, stimulants, spts. of turpentine, blisters, dry cups, acet. plumbi, and opium, to restrain the diarrhæa and hemorrhages, with suitable nourishment, &c. Of the first eight cases so treated, four died.

In consultation with the attending physicians, we determined to put the rest of the cases on the use of ten grains of chlorate of potassa, every four hours; small doses of laudanum to restrain the bowels, nourishing, but easily digested broth, milk toddy, and whenever hemorrhage or any signs of purpura appeared, as large doses of muriated tinc. of iron and ol. terebinth. as the stomach would tolerate. During the prevalence of the epidemic, chlo-

rate of potassa was the main remedy in every case. Other treatment was used only as auxiliary to this medicine. The drink was a cold infusion of slippery-elm with ice in the first stage; towards the decline of the disease, a warm decoction of the Virginia snake root was substituted for it. The exact ratio of mortality I am unable to give, as I did not keep notes of the cases; but I am sure it did not exceed *one in forty*, after we adopted this treatment." He says, further, that after a large experience, he is perfectly convinced "that no *coup d'etat* of professional skill or dexterity can ever suddenly arrest the progress of the disease. And yet I doubt the propriety of considering typhoid fever a 'self-limiting' disease."

Dr. Kelly recommends very highly oil of turpentine, and he would commence with it early, and continue during the disease. "He is of opinion that so administered, it exerted a prophylactic power against intestinal hemorrhage." Prof. Bowling, of Tenn., has advocated this practice for several years. He regards turpentine a specific alterant, and even more important in the early stages as a *preventive* of bad conditions, than in the later stages as a *curative* of these conditions.

Dr. Hadley speaks highly of blood-letting! without it, he thinks intestinal hemorrhage is almost surely to occur, and death takes place in *three-fourths* of the cases. Should we find a case of fever, supposed to be typhoid, that was benefitted by blood-letting, we should doubt our own diagnosis—we should regard the case as a remittent fever, with too intense local congestion to permit of remissions.

Dr. Dixon speaks highly of quinine; "this invaluable medicine seems to have the power of, at the same time sustaining the tone of the nervous system, while it calms vascular excitement, and though it is not entitled to the character of a specific, it can rarely be dispensed with in the treatment of typhoid fever, at some stage of its progress." Veratrum viride is used but little in this disease in North Carolina.

As we wish to make each paper as practical as possible, we shall outline here our own treatment which does not differ materially from the above We usually commence early with turpentine in emulsion—preceding it with a laxative, if necessary, of rhubarb and hydrargyrum cum creta—the oil to be repeated every four hours. Chlorate of potash is given in tolerably full doses in connection with veratrum viride, if the pulse is much accelerated. This is usually commenced with early, and continued until the tongue is clean, and presents a good surface. Dover's powders are given at night to procure sleep, and often, in smaller doses, at regular intervals, during the day, in order to increase the perspiratory secretions. The Dover's powders are combined with quinine in tolerably full doses. If the stomach is sensative, opium or morphine is used instead of the Dover's powders. If the case presents in its progress great nervous prostration, which it is not likely to do if this treatment is commenced with early, strychnine is combined with quinine and small doses of opium, and administered at regular intervals. Easily digested nourishment is, from the first, administered at such time and in such amounts as will keep the system well supported. Milk punch, or egg-nog, after the first week, and often from the first is allowed in liberal quantities. Under such treatment, modified to meet individual cases, as to doses of medicine and amount of stimulation, we believe will save many cases, and reduce the mortality to about one in fifty. He who pursues rigidly the expectant plan of treatment, in so severe a disease as typhoid fever, we believe falls far short of doing his whole duty.

Scarlet Fever is next considered. He says that scarlet fever and measles have been known to prevail in that State, epidemically, at the same time, and frequently running their course together in the same patient. Last spring we treated two cases in which scarlet fever and measles were combined. Scarlet fever first made its appearance, and on about the second or third day of the rash the measles rash was developed.

In regard to treatment he has but little to say. "Upon the whole, the results of treatment were by no means satisfactory. If the dose of the poison received into the system happened to be greater than could be thrown off by the skin and mucous surfaces, it was almost as certainly fatal as the virus of the crotalus or that of the cabra di capello."

Though contrary to the doctrines taught, when we were a student, we think the treatment should not be unlike what is appropriate for typhoid fever or erysipelas. Quinine in full doses, with Dover's powders, and perhaps tannin; chlorate of potash, with veratrum viride, carbonate of ammonia, and egg-nog. As is recommended in some cases of erysipelas and diphtheria, muriate tincture of iron may be combined with the chlorate of potash. Though the skin may be hot, fever high, and pulse quick, these symptoms will all improve under the treatment suggested above, better than under bloodletting and the usual antiphlogistic treatment.

Cerebro-spinal meningitis is next considered. Dr. Dickson, as well as Dr. Smith, regards this disease but a modificatfon of erysipelas. As to treatment Dr. Dickson says, "Active purgatives were my chief reliance." "After I had fully adopted this course and diligently and perseveringly carried it out, I had no reason to change the treatment, as it was entirely successful." Bloodletting he thought of but little or no service. From the resemblance of the disease to erysipelas, he thinks muriate tincture of iron might have been of service—from theoretical objections he did not try it.

In this disease we have had but little experience. Ten years ago we treated two very severe cases with the usual antiphlogistic treatment—one passed into the hands of a homœopathist and soon died; the other died also, but not until several days later. Called to treat such a case now, after a free purgative, quinine in full doses, Dover's powders, and strychnine would constitute the principal treatment.

Dysentery is the next epidemic referred to. Dr. Dickson does not, like Dr. Smith, believe the disease to be akin to periodical fevers. His prominent reason for objecting to this view, is that dysentery prevails in mountain regions where intermittent fevers do not, as well as in the valleys where the latter do occur. He might have added that, if dysentery was a malarious disease, having a common origin with ague, then quinine should be the most

prompt and successful of all known treatment, which is not the fact.

Dr. Dickson says, "This disease is, for the most part, amenable to treatment, and yields readily to a combination of laxative and anodyne medicines." *Alternation* is often better than *combination*. In some cases he has found large cases of ipecac, as recommended in the *London Lancet*, by E. S. Docker, to be of the first importance. The stomach is made to retain from *twenty* to *eighty* grains by giving a drachm of laudanum, and applying a sinapism over the stomach, half an hour before giving the ipecacuanha. We should suppose it difficult to tell whether the opium or ipecac. was the serviceable agent in these cases. We suppose the ipecac. acts as a cathartic in these doses, and whether the results are better than when the same amount of opium, with an efficient cathartic is given, is with us quite undetermined.

Passing the subjects of *cholera infantum*, *stomatitis*, and *jaundice*—which last has prevailed extensively in North Carolina—in regard to which we find nothing particularly worthy of record here, we come to the subject of *pneumonia*, which concludes our report.

This portion of Dr. Dickson's paper is quite valuable, but made up largely of extracts from other and previously published papers. In the treatment of simple pneumonia, he thinks blood-letting can be dispensed with in a great majority of cases. He believes the type of this disease has changed, and that blood-letting and antimony were not always injudicious. Even now he thinks, "when the inflammatory action is of a high grade, as indicated by a sharp, quick pulse, and great heat of skin, blood-letting, both general and local, will, I apprehend, still be found indispensable." In puerperal pneumonia he thinks the *verat virid.* of the first importance. That portion of his paper relating to *typhoid pneumonia* is copied entirely from the *Am. Jour. of Med. Sciences*, and from a paper from Dr. Bedford Brown. In such cases Dr. Brown regards stimulants to be of the first importance. He says he has often given a patient a quart of brandy a day, and that for days together. Of medicines, the following is a formula he much admires:

℞ Pil. hydrarg., gr. iij.
Quiniæ sulph., gr, iij.
P. Ipecac. et opii., gr. ij. M.
To be given every three hours.

He thinks it important that the patient be brought under the influence of mercurials; hence the blue pill is continued until this end is secured. We think he would find his patients to do *quite as well* on the *brandy* and *quinine*, without the constitutional effects of mercury.

Remarks upon *malarial pneumonia* are copied from a paper by Rev. Dr. O. F. Mason. The treatment of this form is in the main such as would be appropriate for an intermittent fever, with blisters to the chest, &c.

Taken as a whole, we regard Dr. Dickson's paper as one of much interest and practical value, and we have endeavored to give a *summary* of such matters as struck us as of being of the greatest practical interest.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, NOVEMBER 16, 1861.

The noble devotion of Florence Nightingale to the relief of the miseries of sick and wounded soldiers, has made her name a synonym for feminine heroism and philanthropy. The long and patient labors of Dorothea L. Dix among the condemned and outcast of society, and her intelligent and self-sacrificing conduct at this time in ministering to the comforts of sufferers in our military hospitals, have made her an example of womanly energy, guided by the gentlest sympathies of humanity. These noble examples are valuable to the sex as precedents. There are in this country thousands of humane women whose hearts yearn for opportunity to labor at philanthropic work, and yet whose retiring inclinations and modest sensitiveness prevent them from openly assuming any duties which might render them publicly conspicuous. To the essentials of human sympathy, and honest devotion to the cause of public philanthropy, must be added a real heroism that shrinks not from attacks of malignancy or jealousy which might misunderstand or misrepresent.

The above bright examples we have said are valuable as precedents, and seem to have led in a way of goodness in which many will delight to follow. The sphere of woman's usefulness has, by woman, been enlarged. She has brought with her from the retirement of the home circle, and from the close-veiled sick room of the household, her sympathies, her gentleness and pains-taking unselfish devotion, and given all freely where has heretofore been the most forlorn and hope-forsaken abode of human suffering. Her gentle spirit now brightens what would be otherwise the gloomy wards of the rudely constructed, and often hastily filled and badly provided military hospital. Her hand lies on the soldier's fevered brow, and, if convalescent, first supports his feeble frame,—or, it may be, smooths his dying pillow and wipes the death-damp from his pallid face. For such attentions could a good woman be substituted? Would or could the hireling,

who busies himself as the official military nurse, take the place of the soldier's distant wife, mother, or sister, to whose care he has been accustomed, and to whose kind attentions his patriotic devotion and suffering more than ever entitle him? Could he give the sympathy which human nature, rendered sensitive by sickness, requires? Would he keep the sleepless vigils which are often essential to a patient's safety, or would his presence encourage cheerfulness and hopefulness? Would he think to bend his ear to catch the dying whisper, and care to bear the parting words to saddened hearts at home? Could there be a better moral example for the wayward, or could the consolations of the hope in the hereafter be better impressed than by a chaste and devoted woman?

The peculiar fitness of woman for many duties of philanthrophy has not been properly appreciated. The same kind of good services which have been so nobly rendered in miltary hospitals might find abundant field for its exercise among those mentally and physically suffering in our civil hospitals. We have in our midst great hospitals, in which the patients, although really well supplied with what are called comforts—the essentials to an existence—are yet often sadly in want of those attentions and amenities which in sickness the most insensate must crave. A familiarity with a very large hospital has frequently illustrated to us the real lonesomeness of hospital life. The patients are properly fed, clothed, and medically attended, and a formal order is preserved in the wards which makes them, to the casual visitor, look cheerful and attractive, but to the patient everything is monotony. His vision is over but a scope of unadorned white walls and bare floors, and can rest only on his fellow-sufferers.

A hospital is necessarily a secluded place. It is the home of the sick, and should not be overrun by visitors from curiosity, but an extreme of seclusion and exclusion is maintained in our local hospitals. It is true that the patient's friends may, under proper restrictions, be admitted, but what is the case with those who have no friends?—and are not a vast number of the hospital inmates in this country so situated?

It is for the benefit of this forsaken class that we would now appeal. There exists in London a "Visiting Society," composed of ladies, who devote their humane attentions to the mental and physical comforts of the inmates of eleemosynary institutions, particularly to those whose condition would often be much alleviated by articles not supplied in hospitals, or who are without friends to sympathize with their afflictions, or to offer them such consolation as only is acceptable to those from whom hope, as to the affairs of this life, has departed. We cannot think of the subject without bringing up a vision of wan, sad faces, and pale attenuated hands, for a long time familiar in a crowded hospital.

We would suggest to benevolent ladies the formation of a society for the object of visiting the friendless sick in public institutions. By organizing in a body, for the purpose, a system could be given to such charity, and make it comprehensive and efficient. To the truly humane the duty would not be repulsive. The associations connected with such missions would not always be refined, but the sick are sensitive and impressible, and sickness is a great subduer and moralizer.

We intended to have directed earnest attention to a particular class of neglected objects of humanity, and will, at a future time, again recur to the subject.

EDITORIAL NOTES AND COMMENTS.

Subterranean Stoves for Warming Tents.—The Editor of the *Boston Medical and Surgical Journal* speaks thus of the practical operation of this new method of making the tents comfortable. The arrangement, it seems, is one which has long been in use in California, where it is known as the "California stove." He says:

"We found the heat generated by this simple contrivance to be of the most genial character. The dampness of the soil undoubtedly tempered it, so that it was remarkably soft and agreeable. We can hardly say too much in favor of this invention, which may be the means of saving many valuable lives. For drying the wet shoes and clothing of the men, or for mak-

ing tea, it answers an admirable purpose. By it the temperature can be raised to any desired point, and the men can be made as comfortable in the field as in barracks; at the same time the most thorough ventilation is secured by means of oval openings at the top of the tents, through which a current must constantly set, by means of the hot air below. A military officer of high rank made an objection to them, that he thought they would make the men tender and more susceptible to the inclemency of the outside weather. But in this he certainly is mistaken. The idea has long been exploded, that in order to toughen men you must try their powers of vitality to the utmost. It is true that the survivors of such a process are likely to be tough, but it is only because their capacity of endurance was enough to carry them through the trial which was fatal to the weaker subjects, who might have been saved by a less severe ordeal. The point is to make the men more comfortable in their tents; if this can be gained by this simple and cheap method, blankets are of comparatively little consequence. We noticed that a thorough draught was secured for the exit flue of the California stove, by the simple device of placing two headless barrels, one above the other, over the outer opening, and banking up the lower one with earth, so as to form an excellent chimney. We observed, also, that at the outer extremity of the air flue a hole was sunk to a sufficient depth below it, so that no rain could posslbly get access to the fire."

Medical Students.—From the best means of information we have at hand, we gather that the attendance at the Medical Schools in New York and Philadelphia is as follows: University Medical College about 200; College of Physicians about 125; Bellevue Medical College New York, 60; in all, less than four hundred. In Philadelphia, Jefferson Medical College about 250; University of Pennsylvania about 275; in all over five hundred. The facilities for instruction in all the departments of medical science are undoubtedly excellent in New York. The preponderance, however, of Students in the Schools of Philadelphia, would indicate that this city still maintains its ancient superiority in this respect. A referencc to our Medical Directory will give the Student an idea of the hospital arrangements for teaching.

Dr. Marion Sims in Paris.—The Paris correspondent of the *Lancet* says that "Dr. Sims, an American Surgeon of note, and remarkable for his skill in operating for vesico-vaginal fistula, is at present in Paris, and a friend who saw him *à l'œuvre* yesterday, tells me that his dexterity is surprising. The operation in question was attended by MM. Ricord, Velpeau, Nélaton, and Jobert, all of whom were in admiration."

Arsenic Smoking in Asthma.—A correspondent gives us his experience in the use of this remedy, in two cases which came under his observation. The persons had been afflicted with spasmodic asthma over twenty years, and the attack would last five or six days, during which time they could neither lie down nor sleep. His method of administration is as follows: Fill a small pipe half full of tobacco, then add a quarter grain of arsenious acid, and cover it with tobacco enough to fill the pipe full, smoke it, and inhale the smoke. This will cause a tickling sensation in the bronchial tubes, which will be followed by expectoration and relief. In both the cases it was given in the middle of the attack, and each smoked a quarter of a grain each day for six days. No unpleasant effects followed, and neither of them have been troubled since. The success of the remedy in these cases, certainly commends it as worthy of trial, and if it shall prove as beneficial in other cases as in these, the Chinese, with whom the remedy originated, will certainly be entitled to the gratitude of all afflicted with the disease.

Government Hospitals in Philadelphia.—The first site fixed upon by the General Government for the location of a Military Hospital in this City, meets a decided remonstrance on the part of the Board of Health against it, on the ground that it is "totally unfit for that purpose both in site and plan." The location is Water st., above Arch, "in close proximity to the filthy docks of the river, defective in ventilation as well as in other sanitary provisions." The Board do not intend to interfere with the arrangements of the Government for the accommodation, welfare and comfort of the sick and wounded soldier in this city, but desire that hospital sites shall be selected in the more healthy and sparsely settled suburbs of the city, where the sick may enjoy the benefit of pure and healthy atmosphere, and not endanger the lives and the health of the surrounding population. In

taking this action, the Board of Health have evinced a proper regard for the sanitary interests of the city. The great wonder is that any considerations should have induced the Government to select a locality so eminently unfit in every way for a hospital, as the one mentioned above. We trust they will abandon it at once.

Correspondence.

BOSTON CORRESPONDENCE.

Meeting of the Obstetric Society—Of the Society for Medical Observation—Paper on Pelvic Cellulitis.

Boston, Nov. 7th, 1861.

Seldom have we had so severe a storm as has just passed over us. In the lower part of the city, near the wharves, the flood came in over all barriers, drowning out the cellars and covering the streets with the debris left by the receding tide. Numerous wrecks strew the beaches in our neighborhood, and though but short in duration, the violence of the gale will long be remembered.

Our Obstetric Society held a meeting on Saturday evening last. Many subjects of interest were discussed, and numerous cases reported. Growing out of a reported case of puerperal convulsions, quite a general discussion of the relative value of various modes of treatment arose. The point, to which I alluded in my last letter, as having been suggested by Dr. J. Bigelow, that there were two kinds of convulsions, was noticed, and the opinion very freely expressed that in the hysterical forms the patients would get well at any rate, while in the true epileptiform of puerperal attacks, it was necessary to vary our remedies, according to the symptoms and peculiar characteristics of each case. Dr. Channing, the President, thought that in certain cases bleeding had been of signal service, particularly in those cases where there was uneasiness or oppression at the pit of the stomach. This was the elder Ramsbotham's treatment, and his own (Dr. C.) experience had been in favor of this. The experience of most of the members present coincided with Dr. C.

Dr. J. Homans remarked, that without placing too much reliance upon bleeding, he had no doubt that bleeding to a moderate amount, under proper conditions, was a valuable item of treatment, and one which had been too entirely laid aside by the generality of the profession in this part of the country. It prevented effusion and expedited labor. Several miscellaneous cases were read by the President, and numerous cases of placenta praevia by Dr. Read, the Secretary of the Society.

The records of the Society show that during the past year a great number of cases relating to obstetric matters, and very much that is truly valuable have been put in a permanent form, and it is a source of congratulation that the first year, usually so trying, has passed off so well.

The last week's bill of mortality has just been published. Its total is 65—males, 33; females, 32. Consumption claims the largest number, 14. The others are divided among twenty-eight varieties. Not a case of typhoid fever among the whole. If any city can show a better record I am mistaken.

At the meeting of the Society for Medical Observation, Dr. Shattuck read a very interesting paper upon Pelvic Cellulitis, illustrated by cases, which elicited considerable discussion. Perhaps you may not know the object of this Society, which I believe is unlike any other in this country. Its members are required, in their turn, to read a paper upon a medical subject, before the Society. It is the privilege of each member present to criticize this paper as thoroughly as he is able or pleases to do, and by this method the diagnosis and treatment of the reader, for the facts and cases upon which the paper is based, must have been observed at the bedside by the reader, get pretty thoroughly discussed.

The course of lectures at the Medical College commenced on Wednesday, Nov. 6th. The introductory lecture was delivered by Prof. O. W. Holmes, and from beginning to end held the audience in close attention. In a lecture of this kind no particular discussion was expected or desired, and the Professor took occasion to glance over the whole field of medical culture. Chemistry, physiology, and anatomy, with their mutual relations, formed the principal topics. To those who have heard the terse and sparkling sentences of the Professor, I need not say that the occasion was one of most agreeable and delightful pleasure. He closed with an eloquent outburst of patriotism, which brought down the house in thundering applause, and finished by reciting a short poem, which was originally written for the Anniversary Dinner or our State Medical Society, but which, in the present juncture of affairs, was most appropos. It title is "The Two Armies."

The number of students, I am informed, is larger than usual, and the lecture season opens under the best auspices.

Trimount.

NEW YORK CORRESPONDENCE.

"One science only can one genius fit,
So vast is art, so narrow human wit."

Messrs. Editors:—The Academy of Medicine woke up last Wednesday evening, and exhibited stirring qualities, which, if oftener employed for specific purposes, would bring about speedy reformation, and gain for it a better

name than that of "political star-chamber," (swill-milk do-nothing association)—Green versus Mott and Whitney, verjuice asylum, and non-ventilating lecture-room. Now, however, the late discussion relative to Dr. Parigot's learned and astute paper on moral insanity, so full of sound philosophy, interested the most skeptical, and influenced the least prejudiced. The sum of the functions, as exhibited on that controversial occasion, was simply this: Dr. Parigot maintained that it were better to permit ten feigned maniacs to escape justice, than, as has been done, destroy by violence—hanging or otherwise—the life of a really insane man who has been convicted of murder.

Dr. Stevens, with a zeal worthy of a more charitable view, argued that if persons became insane from their own self-abuse, and indulgence in unlawful passions, and *then* committed crimes, they should be hung, and so forth, as "any other man." This is hardly comfortable! Desultory remarks were made by several gentlemen to the point, and with effect. But the coup-detat was a spirito-metaphysico-pathologico-medico-idio theory, uttered with vehemence, and most eloquently enunciated by ex-Judge Edmonds, to the purpose of stating that physical signs are, at times, absent from the insane man.

The Judge's definition of a sane man was excellently correct and eminently truthful, and it was only by defining insanity as cold is determined; that is, cold is the absence of heat, and insanity is the *absence* of certain sane characteristics. All this we enjoyed and admitted; but when the fascinating speaker declared, with emphatic earnestness, that *he*—ipse-autotatas—has cured many victims (of singular derangements) by the "laying on of hands," we must confess that we "did not exactly see it in that light." It was delicious, though, to hear Dr. Parigot try to talk law; and equally pleasing to drink in the medical aphorisms of Judge Edmonds.

Dr. Sims, the successful founder of the Woman's Hospital, N. Y., is now in Europe, receiving the attentions of many savans. He was one of the very few whom Lady Franklin invited to visit her, when abroad. Lady Franklin presented Dr. Sims with $50 for his Institution, on account of the interest taken in it by the late Dr. Francis. May Dr. Sims return soon, and go on.

Dr. Sims has been called upon by a duchess, countess, or lady of great rank, to relieve her from the sad perplexity of no longer bearing children. The learned operator is now treating her, and with the most promising results. Some of the medical and surgical worthies of London have offered him a hospital for his specialty. Should our practicing and efficient brethren succeed in merging the Woman's Hospital into St. Luke's, &c., the Doctor woald be justified in living abroad, and this ungrateful community served right in losing the conscientious talent of an excellent man.

Dr. Eustace Trenor, of this city, has been most successful in the cure of a very bad case of retro-flexion of the uterus, by the judicious use of a double S pessary. The doctor is an able man, and we hope ere long to record for your benefit, an original improvement, on his part, in regard to chronic troubles, not at present to be placed before the public.

Gourmet.

NEWS AND MISCELLANY.

Dr. H. W. Green, the Surgeon of the Seventh Pennsylvania Regiment, writing from Camp Pierpont, states that the men are generally very healthy. They have some little intermittent fever and rheumatism among them, but no more than they would have if they were at home. The Seventh is encamped on comparatively high ground, and the Eleventh are on the left, on higher ground. The fact is, they are almost on the summit of a hill, the ground sloping in every direction, giving them the advantage of perfect drainage. The sites for the encampments of the Pennsylvania Reserves are judiciously selected, particularly so far as regards the health of the men.

A New Remedy for Scarlatinal Dropsy.—Dr. J. Taylor, in the *Lancet*, gives the prescription which he has used, with more than ordinary success, in cases of dropsy succeeding scarlatina, and in albuminuria. For a child six years old he gives:

Benzoate of ammonia,	grs. v.
Spirit of nitrous ether,	gtt. xv.
Syrup of tolu,	ʒj.
Camphor mixture,	ʒj. M

To be taken three times a day. This, with a purge of jalap powder, has answered admirably, the urine becoming free from albumen in a much shorter time than usual, and the patient's strength being afterwards recruited by the ammonio-citrate of iron.

Dr. Benjamin R. Fitch, of Vermont, was murdered by the Mexicans, at Sentinon, on the 12th of August. He was a practicing physician at San Francisco, California, for some years, but left there not long ago for Mexico.

The Hartford (Con.) Hospital, under the care of Dr. Hawley, has gone into operation, although only about one-quarter of the building originally planned is yet constructed. There are now 19 males and 11 females under treatment. Eight of the males were soldiers in the Connecticut regiments. Fifty can be accommodated in the building. Funds are needed, as we learn by a Hartford paper, for the completion of the building, and it is hoped that the wealthy men of that city will not long allow this to be said.

At a meeting of the Buffalo Medical and Surgical Association, Professor Rochester reported 137 cases of re-vaccination. More than half the individuals, he stated. were found susceptible of the disease.

Prof. Stephen Smith, of Bellevue Hospital Medical College, New York, is preparing a work on Medical Jurisprudence in its application to the Practice of Medicine, Surgery, and Midwifery in the United States, and solicits information from members of the profession, in regard to trials for alleged mal-practice, including the notes and charge of the presiding judge in such suits, or the notes of the legal gentlemen engaged.

The ladies who compose the Board of Managers of the Cincinnati Orphan Asylum have elected a homœopathist to the medical department.

The Rapidity of Growth in Fungi.—Mr. Ward, in his work "On the Growth of Plants in Closely-Glazed Cases," says of it:—"I had been struck with the published accounts of the extraordinary growth of the *phallus impudicus*. I therefore procured three or four specimens in an undeveloped state, and placed them in a small glazed case. All but one grew during my temporary absence from home. I was determined not to lose sight of the last specimen; and observing one evening that there was a small rent in the volva, indicating the approaching development of the plant, I watched it all night, and at 8 o'clock in the morning the summit of the pileus began to push through the jelly-like matter with which it was surrounded. In the course of twenty-five minutes it shot up three inches, and attained its full elevation of four inches in one hour and a-half. Marvellous are the accounts of the rapid growth of cells in the fungi; but in the above instance it cannot for a moment be imagined that there was any increase in the number of cells, but merely an elongation of the erectile tissue of the plant." The force developed by this rapid growth and increase of the cells of fungi is truly astonishing. M. Bulliard relates that on placing a fungus within a glass vessel the plant expanded so rapidly that it shivered the glass to pieces with an explosive detonation as loud as that of a pistol; while Dr. Carpenter, in his "Elements of Physiology," mentions that "in the neighborhood of Basingstoke a paving-stone, measuring 21 inches square, and weighing 83 lbs., was completely raised an inch and a-half out of its bed by a mass of toadstools of from six to seven inches in diameter, nearly the whole pavement of the town being heaved up by the same cause" Every one has heard of the portentous growth of the fungi in a gentleman's cellar, produced by the decomposing contents of a wine cask, which, being too sweet for immediate use, was allowed to stand unmolested for several years. The door in this case was blocked up and barricaded by the monstrous growth, and when forcible entrance was obtained, the whole cellar was found completely filled, the cask which had caused the vegetable revel, drained of its contents, being triumphantly elevated to the roof, as it were upon the shoulders of the bacchanalian fungi.—*Macmillan's Footnotes from the Page of Nature.*

☞ A few weeks since, we received a letter enclosing four dollars, to which there was neither signature nor name of town. The letter was post-marked Troy, N. Y. We presume it to be from a subscriber to the Reporter, and he, perhaps, is wondering why no acknowledgment is made of his remittance under "communications received." Should his eye rest upon this paragraph, he will at once learn the reason, and also a lesson which should never be forgotten by any one in writing letters, viz: Write plainly the name of your *town*, *county*, and *State*, and *be sure to affix your signature to your letter.*

Mal-practice Suit.—In the case of Farrell vs. Caldwell, recently tried in the Superior Court of Ohio, before Judge McAlister, a verdict has just been rendered against the defendant, and the damages fixed at ten thousand dollars. The defendant was Dr. F. A. Caldwell, a notorious oculist and aurist of that city, who undertook "to remove an imperfection of the left eye, a scar caused by small pox," of a domestic in one of the hotels. She paid him $30, the sum he demanded in advance, for the operation. The result was the loss of the left eye entirely, and the destruction of sight in the other, by the introduction of certain inflammatory drops into it. The Cincinnati *Lancet and Observer*, from which we gather the foregoing, says, the defendant moved for a new trial.

Sickness and Mortality in the French Army in the Crimean War.—Dr. G. Scrive, Surgeon General of the French army in the Crimea, in his final report, said that the Crimean war lasted, without any intermission, summer and winter, for twenty-four months. The total number of French troops sent to the East at different times amounted to 309,268 men, of whom 200,000 entered the ambulances and hospitals to receive medical aid—50,000 for wounds, and 150,000 for diseases of various kinds. The total mortality was 69,229, or 22⅓ per cent. Of these, 16,325 died of wounds, and nearly 53,000 from diseases—more than three times as many by diseases as from wounds. Of ordinary wounds, 2,185; gunshot wounds, 22,891; frost-bitten, 3,472; typhus fever, 3,840; cholera, 8,196; scurvy, 17,576; feverish, 63,124; venereal, 241; itch, 124. The mortality from scurvy was fearful, also from frost bites.

At the twelve Metropolitan Schools in London, 1,116 students have registered themselves as pursuing their studies. Last year there were 1,228, showing a decrease of 112. The number of new entries is 344 against 483 last year, a decrease of 139.

MARRIED.

Purdy—Stout.—In New York, on Monday, Nov. 11, at St. Paul's Church, by Rev. J. B. Hagany, D.D., Alfred E. M. Purdy, M. D., to Annie F., daughter of A. V. Stout, Esq., all of that city.

Morton—Kirkbride.—On the 12th instant, by the Hon. Alexander Henry, Mayor, Thomas George Morton, M.D., to Annie J., daughter of Dr. Thomas S. Kirkbride, all of this city.

Johnson—Godshalk.—On the 7th instant, at Trappe, Montgomery county, Pa., by Rev. George Sill, B. K. Johnson, M.D., with Miss Rosalinda Godshalk, daughter of J. C. Godshalk, Esq., of Kulpsville.

Horwitz—Gross.—On the 7th instant, Orville Horwitz, of Baltimore, to Maria Rives, daughter of Dr. S. D. Gross, of Philadelphia.

Strickler—Halbert.—Nov. 5th, by the Rev. C. P. Wing, D. D., Dr. Melchoir Strickler, of Hampton, Adams county, Pa., to Miss Annie C. Halbert, daughter of John Halbert, Esq, of Carlisle.

Linquist—Taylor.—In New York, on Thursday, Nov. 7, by Bev. Dr. Burchard, of the Presbyterian Church, Thirteenth st., Maurice F. Linquist, M.D., to Miss Josephine Taylor, ycungest daughter of Isaac Taylor, Esq., both of that city.

Clarke——Gray.—At Bristol, R. I., Dr. Augustus P. Clarke, Assistant Surgeon in the Harris Brigade Cavalry, U. S., to Miss Mary H. Gray, of Bristol.

Cox—Choate.—At Hamilton, Ill., W. M. Cox, M.D., of Savannah, Iowa, to Eleanor M., daughter of Dr. Charles Choate.

Draper—Kinnicutt.—In Worcester, Mass., Oct. 15th, Dr. Wm. H. Draper, of Philadelphia, to Miss Elizabeth Waldo Kinnicutt, of the former place.

DIED.

Huntington.—At Toronto, Canada, on the 8th instant, Mrs. Anna M. Huntington, wife of Dr. David L. Huntington, of this city, and daughter of William H. Allen, President of Girard College.

Field.—Suddenly, on Saturday, 13th September, 1861, at Easton, Pennsylvania, of disease of the heart, Edmunds Horner Field, son of C. C. Field, M.D., in the 17th year of his age.

Bauer.—In New York, on Monday morning, Nov. 11, Oriella Eugenia, youngest daughter of Martha F. and William J. Bauer, M.D., aged 4 years, 8 months and 3 days.

Everett.—At Boston, Nov. 5, at the residence of his father, the Hon. Edward Everett, Edward Brooks Everett, M.D., aged 31 years.

Smith.—In New York, on Saturday, Nov. 9, Charles V. N., eldest son of Dr. D. and Sarah Ann Smith, aged 25 years and 2 months.

Post.—In Warrensburgh, Warren county, N. Y., on Tuesday, Nov. 12, of diphtheria, Rev. Henry Albertson Post, eldest son of Dr. Alfred C. Post, of New York, in the 27th year of his age.

Parker.—At Shrewsbury, 24th ult., Dr. Amos Parker, of Bolton, aged 84.

Miller.—In Lancaster, Pa., Dr. John Miller, in the 69th year of his age.

Communications Received

Connecticut—Dr. A. W. Coates, with encl. *Illinois*—Dr. J. V. Goltra, Dr. C. A. Paul, Dr. J. R. Kay. *Indiana*—Dr. S. F. Myers, with encl. *Iowa.*—Dr. Wm. F. Potter, with encl.; Dr. A. C. Taylor. *Maryland.*—Dr J. Sappington, with enclosure. *Maine* — Dr. A. F. Page, with enclosure. *Massachusetts* — Dr. F. R. C. Kittredge, M. A. Harris, with enclosure. Dr. M. Fuller, Dr. F. Jewett, Dr. H. F. Perry. *Michigan.*—Dr. J. Vaughan. *New Jersey*—Dr. George Haines, with encl.; John Vought, do; J. Hulme. *New York.*—Drs. T. G. Read, with encl.; R. Hernstreet, do; Dr. John Shrady, Dr. J. W. Cobb, Dr. A Van Antwerp, Dr. L. Elwood; Dr. W. M. Fleming, with encl.; Dr. G. D. Slocum; Drs. H. C. Jones, E. Arnold, M. Reinfelder, H. C. Todd, J. H. Pooley, H. N. Fisher, E. R. Johnson, A. K. Hoffman, T. Snowden, H. W. Bell, P. Stewart, C. C. Knight, P. C. Barker, Pratt & Matson, A. B. Dewit, T. S. Dawes, J. S. Philip, W. W. Wetmore, with encl., and six numbers sent to each; Dr. R. Ormiston, W. A. Townsend, Dr. C. P. Smith, Dr. A. B. Vaughn. *Ohio.*—Drs. E. L. Plympten, with encl.; James Baggs, do; A. E. Wigton, do; Dr. J. Dickinson; Dr. H. L. Cheyney, Dr. W. M. Lyon. *Pennsylvania*—Dr. R. H. Muth; Drs. Wm. R. Hull, with encl.; F. B. Martin, do; N. S. Marshall, do; Dr. John Foote, Dr. H. W. Marbourg; Drs. T. S. Gardner, with encl.; B. K. Johnson, do. *Rhode Island*—Dr John Tripp, Dr. M. Fifield. *Vermont.*—Dr. J. H. Talbot, R. L. Flagg, with encl. *Virginia*—Dr. R. S. Seis, Dr. J. C. Spear, with encl.

Office Payments. — Drs. Sproul, Bean, McBride, Helfrich, Housekeeper, Asay, Fussell, Todd, Homer, White, Morris, Roberts.

VITAL STATISTICS.

Of Philadelphia, for the week ending Nov. 9, 1861:

Deaths—Males, 93; females, 105; boys, 51; girls, 58—Total, 198. Adults, 89; children, 109. Under two years of age, 61, Natives, 149; Foreign, 37. People of color, 6.

Among the causes of death we notice—Apoplexy, 0; convulsions, 6; croup, 2; cholera infantum, 1; cholera morbus, 0; consumption, 26; diphtheria, 7; diarrhœa and dysentery, 8; dropsy of head, 0; debility, 9; scarlet fever, 18; typhus and typhoid fever, 7; inflammation of brain, 4; of bowels, 5; of lungs, 13; bronchitis, 1; congestion of brain, 5; of lungs, 1; erysipelas, 0; whooping cough, 0; marasmus, 6; small pox, 6.

For week ending November 10, 1860.....189
" " " 9, 1861.....198

Of Boston, for the week ending Nov. 2, 1861:

Deaths—Males 33; females, 32. Total, 65. Under five years of age, 29. Natives, 44; Foreign, 14.

Among the causes of death we notice—Phthisis, 14; cholera infantum, 1; croup, 1; scarlet fever, 2; pneumonia, 2; variola, 0; dysentery 1; typhus fever, 0; diphtheria, 1.

Of Brooklyn, for the week ending, Nov. 9, 1861:

Deaths—Males, 61; females, 42; boys, 49; girls, 24. Total 103. Adults, 30; children, 73. Under five years of age, 64, Natives, 84.

Among the causes of death we notice—Consumption, 15; convulsions, 9; cholera infantum, 4; diphtheria, 4; scarlet fever, 7; typhoid fever, 3; croup, 2; diarrhœa, 2.

Medical Directory.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr Gerhard.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Medical Library of the Pennsylvania Hospital—Open on Wednesdays and Saturdays.

Philadelphia Hospital.—Medical Clinic on Wednesdays and Saturdays, at 9½ A M., by Dr. J. L. Ludlow.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A. M., by Dr. D. H. Agnew.

Wills Hospital for the Eye and Limb.—Clinics, Monday and Friday at 12 M., by T. G. Morton, M.D.

Howard Hospital, Lombard street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P. M. Monday and Thursday—Dr. Turnbull, at 1 P. M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P. M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1, and Dr. Morehouse, at 5 P. M. Monday and Thursday—Dr. Meigs, at 5 P. M. Tuesday and Friday—Dr. Atkinson, at half-past 3 P. M.

Philadelphia Lying-in Charity.—Clinics on Wednesdays and Saturdays, at 9 A.M., by Dr. A. H. Smith.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesday's and Saturday's, at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street—Clinical Lectures, daily, (except Sunday,) from 2 to 4 P. M., by Dr. Goodwillie.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 266. PHILADELPHIA, NOVEMBER 23, 1861. NEW SERIES, VOL. VII. NO. 8.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

The Antrum of Highmore and its Diseases.

By Jas. E. Garretson, M.D.,

Of Philadelphia.

Diseases of the Mouth—*Continued.*

"While," says Dr. Richardson, "we cannot trace out the nature of that condition of the blood which gives rise to purulent formations, we are informed by observation of the external conditions which foster it. We learn that the pus producing disposition, is an indication of deterioration of blood. We see that when the system is enfeebled, whether by diathesis hereditarily supplied, as by the strumous diathesis—whether by epidemic influences, or whether by deprivation of nitrogenous food, or the inhalation of bad air—that under these circumstances the tendency to purulent formations in local structures is marked, and that, in extreme instances of the kind named, the act of suppuration may take its absolute origin from blood thus depressed."

"Hence, we have reduced almost to a principle in medicine, the saying, that suppurative tendency is a sign of an impaired or vitiated nutrition. Hence, also, we reason in speculative argument, that pus is blood transformed into a lower form of organization, and we adduce, in evidence of this view, that the purulent fluid is incapable of organic construction, and that animals in which the respiration, the circulation, and the animal temperature are more than ordinarily active, the formation of pus, even in an open wound, is an occurrence almost unknown."

These remarks, from the lectures of Dr. Richardson, cannot fail in being suggestive; they have indeed much meaning, but I must be permitted to suggest, to the student reader, at least, that their signification is limited, puruloid conditions are, without doubt, and as the rule, perhaps, indications of asthenia; but it would be very wrong indeed, to jump from such data to the conclusion that every puruloid disease requires treatment from the constitutional stand point, and particularly will this hold good as the diseases of the antrum are concerned.

All diseases should be treated on principle; M. Ricord, as will be recalled by many of my readers, has a favorite prescription for gonorrhœal purulency, which runs as follow:

℞ Pul. Cubebæ, ℥vi.
Ferri carb., ℥iij. M.

Now anybody can understand that such a combination would most naturally act well on a debilitated system; and I should suppose it would be a most happy prescription for half the Roue's of Paris. Where applicable, it would answer as well for the puruloid urethra. I remember, during the past summer, treating a gentleman for a gonorrhœal difficulty, which he had contracted almost immediately after my getting him over an attack of syphilis. I treated this patient locally over six weeks, the discharge constantly increasing in quantity. At the expiration of this period I put him upon copaiba, tinct. of iron and quinia, and sent him to the sea side for a few weeks. The discharge at once began to diminish, and after the eighth day disappeared entirely. A success of this kind would not, however, lead to the inference that every man afflicted with a purulent discharge, should be treated with tonic stimulants. On the contrary, I have had the opportunity of prescribing very frequently for this condition—gonorrhœa. Yet it is seldom that indications have seemed to me to call for anything more than a strictly local treatment; at any rate I have generally succeeded, happily and quickly, in getting the patients over their trouble.

Ozœna depends, as the rule, upon some constitutional taint; the treatment, as the rule, is therefore to be systemic. Yet, not very long since I treated a lad for a fetid discharge from the nostril where the fetor depended on a diseased turbinated bone, the result, as I discovered of a direct local injury. Here was ozœna without consitutional association. A complete and radical cure was affected after two weeks, simply by the injection of chloride of zinc in solution.

In a previous article I suggested that puruloid conditions of the antrum had origin chiefly from two directions:

Firstly, from diseased teeth. Secondly, from constitutional disturbance, manifesting itself in the mucous tissue. I also desired to convey the inference that where the fault was markedly in the first of these directions, the practitioner would err on the right side, if in his first consideration of the case, he should incline to look upon the tooth only in the light of an exciting cause, searching farther for what might be the predisposing conditions. Here, however, as may be inferred, I desire to imply, that most vicious lesions of the cavity may exist, and yet constitutional conditions have really nothing to do with them, and in the treatment needs not at all to be taken into the account.

As a line in practiee, however, running between these two conditions, I may allude to the fact of having met cases where inference of constitutional association seemed most marked, yet, without a resort to other than local treatment, I have soon cured my patient. These are the kind of cases in which the medical man must feel his way; if the practitioner is an observer, it is not likely that more than a week will pass without yielding him just conclusions.

Coming now to the investigation of cases where the cause is to be found alone in some cachexia, we have only to refer back to the general features of disease as manifested on mucous membranes.

The most common, and indeed not very unfrequent cause of engorgement of the antrum, —particularly mucous engorgement—is simple catarrh of the Schneiderian membranes. The patient takes a cold, the excitement expends itself about the nares; by simple continuity of structure, the lining membrane of the sinus becomes vascularly excited; perhaps the duplication at the orifice, because of greater nearness to the central ring of inflammation, becomes congested to such extent as to close the opening, thus we have the elements for engorgement and the mucus thus confined will, if not vented, sooner or later, act as such a source of irritation that it will become to the membrane of the cavity, almost precisely what the virus of gonorrhœa becomes to the continuation of the same membrane lining the urethra. Trouble from this cause is, however, generally so slight, and so quickly over, that it is seldom prominently marked, either to patient or practitioner.

The symptoms designating this condition, are, first, simple vascular excitement of the membrane lining the nares, accompanied with increase of mucus.

As the grade of inflammatory action advances to complete congestion, the excess of mucus associated with the immediately preceding stage is succeeded by a most uncomfortable deficiency in the secretion.

This dryness is associated with all nasal inflammations of advanced grade, but when the trouble is to implicate the antrum, it is even specially marked. A single moment's consideration of the parts makes this very plain! the nares are the natural outlets for the antral secretions; in ordinary schneiderian catarrh, the extensive secretory surfaces of the antra are comparatively unaffected, of course they serve to lubricate to a greater or less extent the passages. When, however, the grade of inflammation is of sufficient extent to congest the duplicatures of membrane which form the nasal outlets, then because of the retention of the mucus the extreme dryness is induced. This excessive dryness may be said therefore to offer the first diagnostic sign of antral engorgement from simple catarrh. From this point, the disease advances or declines. If it declines, the trouble may have been of such trifling inconvenience as scarcely to have attracted the attention of practitioner or patient. If, on the contrary, it advances, the patient will soon be made conscious of the advancing engorgement by a sense of growing heaviness in the cheek, attended by pain of a dull sluggish character. The progress of the disease from this condition is precisely the same as that described as accruing from dental troubles.

Treatment.—This is to be conducted on general principles. Where the disease is seen in its incipient stage, it will, perhaps, be found unnecessary to do more than administer a saline cathartic; or, what I have found a most satisfactory treatment, is, to administer to the patient at bed-time the sixth or quarter of a

grain of sulphate of morphia dissolved in an ounce of the liq. ammoniæ acetatis. This latter treatment I have seldom found fail in breaking up these limited congestions.

Where, however, the disease has advanced to engorgement, and the antrum is found to be enlarging, it may be neeessary in order to insure against even more serious lesions, that treatment shall be directed immediately to the cavity. To accomplish this, extract the second molar tooth, and penetrate the cavity through the alveolus of the palatine fang, in this way such medication as may seem indicated may be readily employed; indeed, for a cure it may be only necessary to keep patulous the wound, leaving the rest to nature, or, if there should seem a lack of vital force, I do not think a much happier stimulant can be employed than the tinct. of iodine.

Furuncular Epidemics.—It will be found, I think, the conclusion of every one who has observed in the direction, that during the existence of furuncular epidemics, mucous and purulent engorgements of the antrum are most common. This is not strange, if we consider the epidemic condition in the light of an exciting cause alone, for in no single instance where my attention has been called in such direction, have I been unable to discover a predisposing cause in a dead or diseased tooth. The same condition of things exist in regions where the intermittents are endemic. All the odontalgias and cephalgias of such a county are apt to be quotidian, tertian and quartan. Furuncle is a condition associated, it would seem, with some derangement of the digestive or cutaneous functions. When epidemic, it would be in proof that a condition existed adverse to the performance of certain physiological functions. With the existence of a predisposing cause of disease about the antrum, it is not at all strange that the addition thereto of an exciting cause should at once increase the effect of the irritant even to the production of active disease—and such, in truth, is the case, the patient escapes the purulency of boils, but he has purulency of the antrum.

Treatment.—This I need scarcely refer to—it consists, imprimis, in removing the source of local irritations; secondly, in correcting the constitutional disturbances.

Scorbutis.—This diathesis, as may be inferred, predisposes to antral purulency and ulceration. To understand the local condition thus induced, it would be only necesssry to examine the gums in an individual so afflicted; the condition of the antrum is akin with the condition of the mouth. The treatment, to be successful, must be from the constitutional stand point. If injection of the cavity seems indicated, it must be gotten at as before directed, or a canula can be passed into it through the natural opening in the middle meatus, the latter is however difficult, and therefore liable to objection.

The Exanthemata are said to associate, not unfrequently, their sequelæ with this cavity. Treatment thus demanded could need no special consideration, it would be a treatment founded on general principles.

The Mercurial Diathesis.—I have before referred to the troubles of the cavity thus provoked. Mercury holds a double pathological relation to the antrum, it predisposes from its constitutional relations, and actively and locally excites, through the periosteal inflammation it excites in the alveoli of the teeth. (The same I should also have remarked of scurvy.)

Treatment.—The indications here are twofold. Resolve, if possible, the inflammation about the teeth, (see paper on alveolar abscess,) and eliminate the mercury from the system. The chlorate of potash and the common muriate of soda are valvable medicines in this direction, the latter I frequently employ, and with marked success.

Syphilis.—This is a disease which it might be inferred, would, of course, have an affinity for such mucous lined surfaces as the antrum. Now mine may be a singular experience, but in contradiction of many authors who have written on the subject, I must say, that with the wide scope afforded by such a hospital as Blockley, (where for over a year I gave the study of the venereal disease the closest attention,) I was unable to find a single case of diseased antra which could with justice be attributed to the cachexia. As I remarked in a previous paper, I have met cases where the origin has been traced for me in such a direction. And I will not deny that in some cases this origin may be justly so traced, but in every case that I have seen, the mercury administered for the cure of the syphilis has seemed to me as having much more to do with the condition than any dyscrasis enduced by the virus.

To be Continued.

Hydrophobia.

By J. B. Somers, M.D.,
Of Somers' Point, N. J.

Few indeed, if any, of all the maladies which the medical practitioner is called upon to treat, present themselves in so formidable and shocking a manner as this king of terrors in disease.

How fortunate for man that it is not generated spontaneously in his own system; that he has not these seeds of destruction, as it were, lurking within him, waiting but for a favorable chance for their further development, to mature only for the certain, shocking termination of their possessor; and that a benificent Providence has placed within him mental faculties which may be exercised in such a manner as to prevent, to a great degree, the frequency of such sad occurrences. Man should ever be grateful for this. It is a melancholy reflection that not one well authenticated case stands upon record where the patient has recovered after the disease has been thoroughly engrafted into the system. When called to a case where the disease has fairly and clearly commenced its dominant sway over its victim, the physician can do but little more than fold his arms and watch the fearful ravages of the calamity upon the system, and secretly hope for a speedy dissolution and cessation of the perplexities attendant upon its prolongation. Such an one cannot help feeling the extreme poverty of knowledge as touching the case, and as yet, how little science has developed concerning its true nature. He knows not the poison—from whence then comes his antidote? His anæsthetics may ameliorate the effects, but they cannot eradicate the cause, from which it would seem that the day is yet far distant when this disease will cease to horrify us, and we can claim it within the limits of our control. Such a time, reasoning from analogy, will come, and the period may be greatly hastened by agitating the subject, by a thorough and continued investigation of scientific men. No harm can directly result from such a course, if no possible immediate good, since as one author briefly but truthfully says, "all die;" but that beneficial effects will ultimately ensue, I conceive ought not to be doubted. If, indeed, there can be anything more disastrous, it must follow from such consequences as these; that having found a remedy, we may not have found its antidote in full, and that man may thus become the progenitor of this disease, *per se*. Should this, in truth, be the case, then it is well that all *do* die; but this may, in fact, be nothing but a mere speculative theory, and should have no more effect to impede our progress in research, than a gossamer thread the movements of the physical world. For the furtherance of such an investigation, to those who may at any time have an opportunity, I venture to throw out a hint or two, and revive others which may be valuable, or may not; time and experiment alone will prove their efficacy.

We are told that the disease originates in the canine and feline tribes exclusively; communicable from them to man or beast, and from man to beast, and, that the great probability is, from man to man. The latter dangerous experiment remains untried. The exciting causes laid down in our medical books, are heat, cold, thirst, and excessive sexual excitement, where those desires remain ungratified. The latter of those herein enumerated, I presume to be the main cause; others are not denied, but admitted. In the locality of my practice, some few years since, during the excessive heat and drought of the summer, foxes were driven from their habitations to the abodes of men, presenting many of the symptoms of beasts laboring under rabies—frothing and furious. Many dogs, also, were known to be affected, and were destroyed. The question remains to be settled whether the disease originated with the dogs or foxes, or in both spontaneously.

To obviate the tendency to exciting causes then, becomes an imperative duty. The first step toward such an enterprise, I am inclined to believe is *castration*, it seldom occurring spontaneously in such as have been, and perhaps never where it is practised early in the life of the animal. It is well known that the mongrel breed are more subject to this disease than are the pure, and observation in this respect is confirmatory that sexual excitement is the greatest of all causes. Moreover, the usefulness of the animal is not in the least impaired, but his vigilance is rather increased. Where the operation is performed there is less disposition to rove and mingle with others, consequently his risk of being bitten, and propagating the disease, is materially lessened. Were the civil authorities to take this into consideration, and compel such measures, saving a certain proportion for propagation, we would not only have fewer cases of hydrophobia, but an improve-

ment in the species. Of the other causes, measures should be taken to eradicate and avoid, as localities and means may determine.

I look upon the termination of the disease as resulting from paralysis. We see this manifested in the various stages of the disease, beginning with those nerves which control the process of digestion, or perhaps those of respiration, and gradually extending itself over the entire economy. This partial paralysis, as it were, seems occasionally to be suspended for a time, so that the patient is enabled to eat or drink quite readily, when he sinks beneath the extreme exhaustion consequent upon the attack, or an increased fury of the disease speedily puts an end to the wretched sufferer.

The period of incubation is the one of responsibility, and the physician is culpable if every means whatever in his power is not exerted to stay the progress of the disease; and while I would suggest an agent which may prove prophylactic, and, as I sincerely hope, remedial, nothing is further from my intention than to have any person relax the efforts and agencies commonly used, and which have so often proved beneficial as preventives.

Of all the therapeutical agents which our materia medica afford, none occupy the position of the nitrate of silver applied to the wounded part, but nowhere can I find of its internal administration. It is considered externally as a specific, why may it not prove so internally? Given for a short period of time, in large doses, might entirely neutralize the poison. It might, however, be protracted in small doses after the first few weeks. The discoloration of the skin should form no objection, as who would not tolerate it rather than suffer the consequences of such a disease. Moreover, the slightest appearance of discoloration would be evidence of the sufficiency of its administration, and I earnestly request all who may have an opportunity to give it a trial, and report its effects.

If, indeed, paralysis be the ultimatum, then there suggests itself another idea in the treatment—to combat not the premonitory symptoms, but the anticipated result. Here, again, in looking over the treatment for paralysis, we find the nitrate of silver prominent, and under its administration we may possibly successfully neutralize the cause of the disease, and remedy the result which would lead to destruction.

Large doses of strychnine probably would commend itself as our next best agent, in case the nitrate had not time to act, or where it had failed. The entire subject must for a time be a subject of much conjecture and perplexity.

Is Kousso a Specific for Tapeworm?

By H. L. Horton, M. D.,
Of Morrissania, N. Y.

The Brayera Anthelimintica or Hægenica Abyssinica, a flowering tree of Abyssinia, belonging to the family of Rosacae, has long been known as a powerful antidote to both species of teneæ, and the fact that kousso is the name not only of the tree, but also of the tapeworm itself, clearly indicates that among the natives of that country it is regarded as an infalible specific in the expulsion of this troublesome parasite.

Notwithstanding this knowledge of its remedial properties, the virtues of kousso have as yet been but to a very limited extent tested by the profession of this country. This in a great measure, perhaps, has been due to the great difficulty of obtaining it, and also, as a consequence of this, its high price.

But as this objection to its general use no longer exists, the price now being such as to place it within the reach of all classes, it would be subserving the humane purposes of our profession, were physicians to resort more frequently to it, and publish, for the benefit of the medical fraternity in general, their experience in its use as a remedy for tapeworm.

With this object in view, I would beg leave to lay before the readers of the Medical and Surgical Reporter, a brief account of the following case, successfully treated by the administration of kousso.

During the latter part of September I was consulted, professionally, by a young lady, who exhibited to me, in an ordinary pill-box, several specimens of what she styled "worms." These she had passed quite frequently, and for some little time after being voided, they would manifest every evidence of a separate and independent existence.

I at once pronounced them to be the cast-off, disjointed portions of the *Tænia Solium*, and informed her of the nature of her disease, of which she seemed not to be aware, although she informed me that she had taken, as prescribed by her attending physician, spirits of turpentine in large doses, and frequently repeated.

Her previous history I learned to be as follows; residence New York city; age 20; married about three years; never has borne children or been pregnant; temperament nervo-bilious; health from childhood excellent. The first indications of disease manifested them-

selves about a year since. Habit of body rather full, with considerable embonpoint. Always accustomed to good living.

During the past year she has been gradually and constantly losing flesh, notwithstanding the appetite continued excellent, and at times was even inordinately craving.

A distressing sensation, which the patient described as "worse than pain," was often experienced in the right hypochondriac region, frequently extending across to the left; dull pain occasionally in the forehead, attended with dizziness and dimness of vision on assuming an upright position after stooping, or even rising from a reclining or sitting posture. Her eyes were characterized by an unnatural dullness and languor, appeared somewhat sunken, and were surrounded by a dark areola.

She was troubled with a constant, and sometimes almost intolerable, itching about the nose and anus. A peculiar gnawing and pinching sensation was often felt around the umbilicus, especially at night, it was also always aggravated by fasting, and relieved immediately by partaking plentifully of food.

Treatment.—Visited the patient October 1st. Enjoined total abstinence from food, but permitted the drinking of lemonade, *ad libitum*, and gave the following:

℞ Podophyllin, gr. vi.
Pulv. jalapæ, gr. xi.
M. et. ft. ch., No. vij.
S—One powder to be taken every eight hours.

Oct. 2d. Found the patient suffering somewhat from hunger, pain quite severe, gnawing and pinching sensation quite distressing. Bowels had moved several times. The powders were directed to be continued.

Oct. 3d. Patient suffering but little from the effects of abstinence, although the remaining symptoms of yesterday still continued. Bowels had moved often and freely, attended with considerable griping. Pulse indicated weakness. Directed the continuance of the powders as before.

Oct. 4th, 10 A. M. Patient about the same as yesterday, with an increasing sense of weakness. Gave the following:

℞ Pulv. kousso flo., ʒij.
Aqua bullientis, Oss.
M. et. ft. infus.
S—The whole to be taken in the course of half an hour.

At 1 o'clock, P. M., ordered the following:

℞ Ol. terebinth., ʒi.
" ricini, ℥iss. M.
S—Sum ad haust.

Between three and four o'clock the bowels again commenced to move freely, and continued to do so, at intervals, until 5 o'clock A. M., October 5th, just seventeen hours from the time of administering the kousso, when an entire *Tænia Solium*, sixteen feet in length, was expelled.

Patient somewhat exhausted; pulse regular, but weak. Enjoined rest, and a light nourishing farinaceous diet.

Oct. 7th, 10½ o'clock, A. M. Found the patient rapidly regaining strength and spirits.

Least there might be more of these unwholesome parasites remaining, I again administered the following:

℞ Pulv. kousso flo., ʒiij.
Aq. bullientis, Oss.
M. et. ft. haus.
To be followed, as before, by—
℞ Ol. terebinth, ʒi.
Ol. ricini, ℥iss.

Oct. 8th. Patient comfortable. Bowels had moved freely, but not attended with as much pain and griping as previously. No trace of the existence of any more tænia.

In concluding the report of the above case, I would state that the patient experienced not the slightest unpleasant sensation from the effects of the kousso, clearly establishing the perfect safety of its administration, rendering it valuable as an anthelmintic, even in children.

Ophthalmological Curiosities.

By Julius Homberger, M.D.,

Ophthalmic Surgeon to the Brooklyn Medical and Surgical Institute, late Assistant of Dr. Sichel, in Paris, etc., etc.

I.—A GRAIN OF GUNPOWDER IN THE CRYSTALLINE LENS.

A gentleman consulted me sometime ago about his right eye. He had been examined previously by many physicians, who had given him no satisfactory explanation of his trouble. He had lost his right arm and left eye by an explosion of powder fourteen years ago. The place of this eye was supplied by an artificial one.

Without any inquiries about the nature of his disease, I examined first the eye in the daylight. Except a few black spots under the con-

junctiva, near the internal angle, there seemed to be nothing abnormal. The cornea was transparent, the iris perfectly movable; the lens also transparent.

I proceeded to an examination with the ophthalmoscope.

When I first threw the light in the pupil, I saw near the anterior inferior margin of the iris, an obscuration of the crystalline body; the obscurity was round; was about two millimeters in diameter, and was of an intense black color. The pupil speedily contracted in consequence of the dazzling light thrown into the eye, and almost half the black spot disappeared under the margin of the iris. The eye-ground was perfectly normal.

The patient was much astonished that I knew his trouble without his information. He saw the obscurity in his lens as a large, blackish scotoma before his eye. The movements of the scotoma were identical with those of the eye; he saw it particularly when looking toward a white wall or cloud. In strong light it seemed smaller, in consequence of a part of it being covered by the margin of the iris. In examining with lateral illumination—a method most valuable for the observation of all kinds of diseases of the lens and iris, first recommended by Himly, and cultivated by the Berlin school—I found that the black body had a real diameter of only half a millimeter, and consisted of a grain of powder, and that it was situated about half a millimeter's distance from the circumference of the lens. The iris was, as I found, now forming a little angle at the internal and inferior part of the pupil, in consequence, undoubtedly, of a cicatrix in its substance caused by the perforation with the grain of powder. As the patient had only one eye, I did not want to dilate his pupil in order to see whether the iris was adherent to the capsule at that point, but I believe so, as the mobility of this portion of it was considerably weak, a circumstance I had often seen before. The cornea did not show any cicatrix. It is astonishing that in this case the foreign body did not raise the obscurity of the lens, not even around itself. There is scarcely any opacity of the crystalline body, except a little diffuse whiteness between the point where the grain must have entered, and the place where it is now.

Probably there has never been observed a case similar to this, and I presume, that without lateral illumination and the ophthalmoscope, the diagnosis would have been impossible.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

SURGICAL CLINIC.

Service of Dr. Gerhard.

November 16, 1861.

BRONCHITIS—TUBERCULOSIS.

This was the case of an Indian boy from one of the California tribes of Indians, some eight or ten years of age, who came into the house laboring under an attack of bronchitis, but after a few days it was proved to be complicated with tubercles. The former frequently precedes the latter. We infer the presence of tubercles from the following physical signs,—from the intense fever present, especially as it is paroxysmal in its character, and followed by sweat; upon his admission he had fever every morning and a chill; from the character of the pulse, quick, jerking; from the emaciation which is great; he had cough sometime before he came here; his expectoration is slightly mucus; skin hot; tongue white; bowels regular; his chest is well conformed, its walls yield equally to the ingress of air to the lungs; in the lower portions resonance is clear; in upper portion of left, percussion dull, respiration is bronchial with crackling sound, showing a slight softening of tuberculous matter in the lung; about the middle we find the loose mucous rhoncus with bronchial respiration; in the upper portion of the right there is a slight trace of mucus rhoncus. There is then we infer both from physical signs, percussion and auscultation, in addition to bronchitis, a development of tubercles in the lungs, which so far as my observation extends are not in children, as much concentrated in the summit of the lungs as in adults, but scattered more completely over their entire substance, and run through their course much more rapidly. The prognosis is unfavorable. The change of climate the child has undergone is great, his active life in the open air has been changed to a more sedentary one, he is away from his home.

The treatment to be pursued will have reference both to the bronchitis and to the tubercular development in the lungs. Give him a combination of squills, wine of ipecac., and solution of morphine, in proportions suited to the age; give him also a drachm of the fluid extract of cinchonæ twice a day, and a dessertspoonful of cod-liver oil three times a day.

CHRONIC INTERMITTENT FEVER.

This was the case of a seaman who was attacked with intermittent fever, about one year ago, in Norfolk, Va., which is one of those localities where this disease is exceedingly prevalent The disease first took the quotidian then the tertian form, and with the exception of a slight chill on his admission to the hospital, he has had no return of it for eight weeks past. He left the service on the 2d inst. You will observe the peculiar leaden, ashen appearance he exhibits, which indicates an altered

condition of the blood, from which, if continusd, may result dropsical effusion as a symptom of disease of several organs of the body. The lesion of the blood in those cases is in my opinion consecutive to, and not preceding the fever. There is also enlargement of the liver, it dips down two inches below the ribs, and is one-third larger than normal. The spleen is also slightly enlarged. In the treatment of this case, the first thing to be advised is a change of climate. He should take a long voyage at sea, or a long journey, and he should continue persistently for a long time the use of some anti-periodic. As he has taken quinine freely, I would advise a change to the use of the fluid extract of cinchona, of which, give him a teaspoonful two or three times a day. A change from the one to the other you will find to be beneficial. He should also take ferri per hydrogen two grains twice a day, and should make use of the salt bath with frictions every day. For the peculiar condition of the liver in such cases, mercurials ought not always to be used. So far as my observation and experience goes, the altered condition of the blood does to some extent interfere with the favorable action of the mercurial. I would therefore keep the bowels open with a compound aloetic pill, one or more every night, as occasion requires. His diet should be nourishing, meats, but little fruit. He may have one small bottle of porter each day. And here let me caution you in regard to stimulants. They should be prescribed with much care to avoid entailing upon the patient the habit of intoxication. If the patient be a female, and opium the remedy prescribed, you should always bear in mind that females are more apt to fall into the habit of opium eating, than of resorting to alcoholic stimulants.

PHILADELPHIA HOSPITAL.

Nov. 12, 1861.

MEDICAL CLINIC.

Service of Dr. Ludlow.

TYPHOID FEVER.

J. R., 22 years of age, a volunteer in the national army, one of the bloody 69th, and was at the battle of Bull Run. Up to the time he was taken sick at Baltimore, he was a vigorous, healthy man. He was admitted to the hospital on the 10th; had been sick several days; succumbed gradually under a general feeling of prostration. When admitted here he had a peculiar sodden hue of countenance; eyes heavy and dull; answers questions with effort, as though it were hard labor; tongue red, dry, now bordering upon the brown; pulse soft, slow, easily compressible; epigastrium tender, and tenderness in the region of liver and over abdomen generally; bowels were costive, now more regular; slight bronchial irritation, but nothing of importance; upon the surface of his body generally, tnere is a peculiar rash, which disappears upon pressure. But the one great feature of the case is the utter prostration which he feels; a disinclination to talk, or to act, or even to think. And such is the effect of this disease upon the system. The strong, vigorous, healthy man—the Hercules—becomes weak and feeble—the infant. You all recognize the disease. It is one of the first, and perhaps one of the most frequent you will meet with in your practice. The treatment pursued in this case is, quiet; careful watching of all the symptoms. I deem it necessary to give but little medicine in such cases. He has had turpentine stoups to his abdomen; he has had spirits mendereri with nitre; he has taken the essence of beef with wine whey, and this is the sum of his treatment thus far. As a general instruction, you should watch the organ more particularly affected, whether it be the bowels, the kidneys, the liver, the lungs, or the brain, and administer the appropriate remedies. As this case progresses other remedies may be necessary, such as quinine, turpentine for the red tongue, or a blister to the neck.

Medical Societies.

MEDICAL SOCIETY OF THE COUNTY OF ALBANY.

Reported by S. D. Willard, M. D.

The annual meeting of this Society was held in the City Hall, Albany, on Tuesday afternoon, November 12th; the President, Dr. S. Oakley Vanderpoel, presiding.

In addition to a large number of members present, were the students of the Medical College.

Dr. S. H. Freeman read a paper on Medico-legal Evidence, in which he set forth the difficulties incident to medical testimony before the courts, and the tendency of medical witnesses to espouse the interest of the cause in question, on one side or the other. Medical witnesses should not regard their testimony as deciding the issues of a cause. With this he has nothing to do. Medical facts rest with him, but not results.

Prof. Charles H. Porter, from a Committe on Poisons, read a report of three cases. The first was The People *vs.* Elizabeth McCraney, for the murder, by poison, of her step-daughter Huldah. The trial was held at Otsego county, New York, in December 1860. Dr. Porter noticed the general circumstances, the symptoms, post-mortem appearances, chemical examination and conclusions deduced.

The illness of the deceased began about the 29th of April, 1860, and gradually increased in severity until the time of her death, on the 11th of May. Her malady not being understood, an inquest was held to ascertain the cause of death, suspicions having been aroused by the fact that her disease was unknown, and by rumors that other of the McCraney family had died suddenly under suspicious circumstances.

The accused had almost the entire charge of deceased during her illness, and expressed

anxiety to the physician that the patient's bowels were so constipated. Enemas were ordered, and podophyllen was administered. The patient had nausea and vomiting, and was thirsty. Later the thirst was more considerable, the patient nervous, and did not sleep well, the pulse increased to 100, the countenance was fuller, and puffed up about the face and neck. These indications were succeeded by pain in the stomach, spasms in the extremities, pulse accelerated to 130, pupils contracted, and the appearance of exhaustion. These symptoms increased, a profuse diarrhœa occurred, which continued at intervals a few hours before death. The post-mortem examination revealed a number of small black spots in the stomach, small intestines and colon, similar to ulcerations of the mucous membrane. Having been led to suspect metalic poison had been administered, the tests were accordingly made, and arsenic discovered, no pains being spared to secure accuracy in the investigation. The syringe which had been used was likewise fonnd to contain arsenic, the piston being saturated with the powder. The amount of arsenic obtained from this source was a fraction over four grains. Thus it had been introduced into the system; and also, in conclusion, it is believed to have been given by the mouth, in small doses, several times. There are but few instances of murder by the injection of poisons on record. The trial resulted in acquittal of the accused. "*Murder will out.*" She was indicted, and tried in June 1861, for the murder of her brother-in-law by poison, (case 2,) Allen Baker, in July 1850. The accused and her husband, lived at Allen Baker's, who fell ill June 29th, 1850. The accused poured his coffee, and gave him his food, in common with other members of the family. It affected him unpleasantly, and after each administration his symptoms were increased in violence, which were such as arise from arsenical poison. He died on July 5th, 1858. The body was exhumed January 9, 1861, ten years and six months after death, which, being fully identified, a most rigidly careful analysis was made of various parts of the body of the earth above the coffin, and the earth below it, and of the debris contained in it. The contents of the thorax alone, yielded 1, $\frac{433}{1000}$, grains, with the evidences that it had been introduced into the tissues before death. This case is interesting from being one of a few where arsenic was found after a decease of years, in a body which had died from its administration.

Dr. Swinburne read a paper on the exsection of the hip-joint. The case was a lad ten years old, who had been several months suffering severely from the disease, had become feeble and emaciated. The operation was performed April 3d—choloroform being given, the head of the bone was exsected, and the dead bone gouged from the acetabulum, the limb was straightened, and retained by simple extension with a pulley. The lad, in good health, was present at the meeting, and exhibited to the Society. He wears Sayre's apparatus, runs about on crutches, can move the limb in any direction, is daily gaining strength to it. (For this paper in full see Reporter, &c.)

Dr. Porter also read an interesting paper on Arsenic Eating, a habit that prevails more particularly among the peasantry in several Austrian provinces. Arsenic eaters are strong, healthy people, belonging mostly to the lower classes, as grooms, laborers, etc. The habit is acquired in early life, while the subjects of it live to a reasonably advanced age. It induces courage, quarrelsomness, and amorousness. The inducements to arsenic eating are protection against every kind of disease. The habit is often continued twenty or thirty years, but the subjects of it at length die of a gradual wasting. Its effect is to improve the general complexlon, and perpetuate the appearance of youth. The habit once contracted is difficult to be discontinued. The quantity taken is increased to four or five grains daily. Given to horses, it increases their liveliness, their sleekness, and causes froth at the mouth greatly admired.

Dr. Vanderpoel delivered the annual address. On a former occasion, he had endeavored to establish the fact that the use of bleeding in cerebral diseases could only be determined by appreciataing, so far as facts and symptoms would permit, the pathology of the different cerebral disorders. Bleeding having for a long time been considered universally remedial in this class, the different affections, so to speak, were grouped around it as a stand point, so that to each might be applied the test of its efficacy. On the present occasion, it was sought to apply a similar course of reasoning to the different forms of local paralysis. In the application of remedial agents here, it is of greater importance to determine the pathology, whether a particular case depends upon actual disturbance of the structure of the cord, or is wholly reflex in its character. In the one case, mercurials may be of great service, and strychnine and its allies prejudicial, while in the other, the reverse condition exists. In illustration of this opinion, the conclusions of Claude Bernard were noticed as bearing upon and sustaining the theory. It is important then always to distinguish paraphlegia arising from reflex causes, from disease of the substance of the cord itself, or of the membranes. This is not always easy. Certain distinctions in general terms are prominent. In reflex paraphlegia, the local disease *precedes* the paralysis, and the paralysis bears a direct relation to the curative condition of the local malady. In the reflex variety, the paralysis is not as complete. In myelitis, as the disease progresses, a corresponding increase in the paralysis, involving one after another of the organs, as it rises along the cord, can be traced. But the pathology of the spinal cord needs to

undergo an analysis such as has marked the pathology of diseases of the chest.

Dr. Vanderpoel, in conclusion, alluded to the several members of the society who have nobly responded to the call for surgeons to accompany our brave volunteers in their defence of their country. Hoff, originally surgeon of the 3d Regiment, has been promoted to Brigade Surgeon, and has reported for duty to Gen. Hunter, in the west. Chapin is surgeon of the 30th. Atherly of the 22d; Edmerton, assistant of the 18th; Van Renssalaer of the 3d, and Chambers of the 60th. Others at home have not been idle. Dr. Cogswell, as inspecting surgeon of the depot, has been constant and rigid in his duties.

Dr. Swinburne, as Hospital Surgeon, has treated fourteen hundred and twenty-seven cases, with a mortality of only twelve. These were all cases too sick to be treated "in quarters," and hundreds of them presenting intense types of the particular disease, So small a mortality is a sufficient evidence of skill, care, and watchfulness on the part of himself and assistants. Drs. Hare, March, and Cogswell have been constituted the Medical Commission for the examination of applicants for the position of surgeons and assistant surgeons in the army of New York State. The trust has been arduous and responsible; 431 candidates have been examined; 203 were passed as surgeons, 155 as assistant surgeons, and 69 rejected.

The duties of the President, as Surgeon General of the State of New York, as is well known, have been constant and laborious. The establishment of the medical departments at the various military depots; the provision for the vaccination of all the troops; the selection of surgeons and assistants for the various regiments; these have imposed much severe labor, but the duties incident to them have been discharged with a faithfulness and ability that reflect honor upon our profession and the State of New York.

The monthly meetings of the Society will be resumed during the winter.

—o—

New Syringe for Diphtheria.—Dr. Aldis, of London, (Eng.) has suggested an improved instrument for gargling in diphtheria and other affections of the throat. It differs from an ordinary syringe only in having a curved pipe, with a closed end. It has two rows of apertures, one for directing the jets of fluid horizontally, the other for sending them obliquely upwards, so that the posterior fauces may be well cleansed. The piston is made to work easily, and can be readily stopped when sufficient fluid has been injected. The instrument appears to us to be admirably calculated to fulfil the object for which it is designed, and in cases of children who do not know how to gargle, or of adults who are unable from prostration to do so, may be the means of relieving the sufferings of impending suffocation.

EDITORIAL DEPARTMENT.

PERISCOPE.

Summary of Papers contained in the Transactions of the American Medical Association, Vol. 13th, 1860.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

(*Continued from page* 162.)

The next paper in the Transactions is a *Report on Morbus Coxarius or Hip Disease*, by Lewis A. Sayre, M.D., of New York. This is an able paper of ninety pages, a full synopsis of which we have not space here to give. This disease has been almost universally regarded as essentially strumous in its origin and character. This opinion is controverted by Dr. Sayre. Among the arguments advanced in support of his views, are the facts that the disease does not respond curatively to the usual anti-scrofulous remedies, whereas the local treatment, if judicious, is abundantly adequate to the cure. The constitutional impairment he regards as the result of the local disease, almost unparalelled suffering, and necessary confinement, and not the local disease the result of the constitutional.

In the *third* stage of the disease it has been almost as universally believed that in many cases *true luxation* of the head of the femur took place upon the dorsum of the ilium. This Dr. Sayre denies—believing that true luxation never takes place. Shortening and deformity are the result of a combination of causes, *First*, muscular contraction and twisting of the pelvis; *Second*, absorption of the head of the femur; and *Third*, "as the upper portion of the acetabulum is *absorbed by the constant pressure*, the periosteal inflammation, which is occurring at the same time outside of the joint, is constantly throwing out new material, and we even find firm osteophytes of considerable magnitude; and thus, as the progressive absorption goes on within the joint, there is a constant *deposition* outside of the joint, by which means the *acetabulum, with the capsular ligament* and contents, is, as it were, slipped up on the dorsum of the illium, so that *instead of a luxation* of the hip, we have in fact a *luxation* or *rather a displacement of the acetabulum itself.*"

The *treatment* advised consists, in the first stage, of local depletion, a relaxed condition, and "*rest of the joint, and perfect freedom from pressure* of the *inflamed synovial membrane.*"

If, in spite of treatment, the details of which we have not space for, the effusion into the joint is so great that the pain caused by the hydrostatic pressure is intolerable, he would recommend puncturing the hip-joint in order to secure its exit. In the third stage of the disease, if *caries* of the bone exists, he would advise exsection of the head of the femur, and the removal of any diseased portions of the acetabulum with a gouge.

As before remarked, perfect rest of the joint, and the removal of friction and pressure of the dis-

eased surfaces by means of extension, are really the all-important objects of treatment. As is generally known, Dr. H. G. Davis, in the spring of 1860, devised an instrument, by means of which these ends could be accomplished, and the bed-ridden patient placed upon his feet without discomfort or injury. Dr. Sayre has modified this instrument, and, he thinks, greatly improved it. However, as the principles of its action is not altered, the honor of the invention belongs wholly to Dr. Davis—the credit of the improvement only belonging to Dr. Sayre. As a description of Dr. Sayre's instrument would be unintelligible without an illustration, we must refer our readers to the original paper.

Dr. Andrews, of Chicago, has devised a simpler instrument than either, and he thinks better, with which he accomplishes the same ends. (For a description, see the *Chicago Medical Examiner*, for December, 1860.)

For the treatment of morbus coxarius, extension by means of these instruments is one of the greatest improvements of modern surgery. Freedom from pain, the benefits of air and exercise, and consequent improvement of general health, are thus secured to the patient. For the manner of application, and appropriate times for use, we must refer the reader to the respective papers of their inventors.

The next paper in the Transactions is a *Report* on the various *Surgical Operations*, for the Relief of Defective Vision, by Montrose A. Pallen, M. D., of St. Louis. The paper contains about sixty pages, and, as it treats of a variety of operations, and, as we suppose, in a manner not dissimilar from works upon opthalmic surgery, and as our want of study and practice in this branch disqualifies us for a just analysis of its contents, we shall pass it without further remark.

Immediately succeeding the paper just referred to, is a *Report on the Improvements in the Art and Science of Surgery in the last Fifty Years*, by Joseph N. McDowell, of St. Louis. We regard this as an able paper, and shall make occasional extracts bearing upon such matters as seem to us of the first importance. Dr. McDowell favors the operation of trephining for the cure of epilepsy, which he says he has performed more than a hundred times! The operation was first performed in this country by B. W. Dudley, M. D., of Kentucky. Dr. McDowell says: "I would recommend that the operation should not be performed when such injury has been done to the brain, by repeated attacks of epilepsy, as to produce idiocy; for, in such cases, you risk the life of the patient without an object, as the brain is not likely to resume its healthful functions." He says further: "I would never use chloroform, or any other anæsthetic agent, in operations on the head, for in all cases insensibility is produced by a rush of blood to the head, or a retention of blood in the brain by venous congestion, as is evinced by the pupils of the eyes." Again, he thinks "it imprudent to operate on a patient when there has been no injury, or when there is no depression of bone." This last rule he has violated three times with success. Query: Can the rule be always violated with success? If so, why the rule? if not, when may it be disregarded?

The author says: "The only patients I have ever lost from this operation, in more than one hundred and twenty cases, have been four in number," and these all died of erysipelas.

In regard to the use of *chloroform*, he says: "I have determined never to give chloroform in any operation but when diluted with sulphuric ether, and then never to its fullest extent; but if my patients will have an anæsthetic agent, will give them as much good whiskey as they will drink, which, after all the boasting of the advocates of chloroform or ether, is the *very best agent of the kind that can be used*, and answers all the purposes of the others without the dangers attending their use." We grant that whiskey and opium will produce insensibility to pain, but we believe morally and otherwise it is infinitely inferior to chloroform or ether. We have seen patients perfectly insensible under the action of whiskey, but its effects do not pass away so readily, and really are not so evanescent and harmless as is chloroform or ether. . . . "Were I an autocrat in surgery, I would banish from my dominions all anæsthetic agents but opium and alcohol." What would those surgeons say to this, who would deny the drunkard his usual stimulant for days before administering chloroform. one of which done so with fatal results not long since? The chloroform should always be preceded with the administration of a stimulant.

In diseases of the lower jaw, he observes that the upper or alveolar portion is in nearly all cases first affected, and can often be removed, retaining the base of the bone. To this portion the muscles and the tongue are attached, and it is of the first importance that it be saved when it can be.

On the *removal of the parotid gland*, Dr. McDowell makes extended remarks. That it could be removed has been denied by several surgeons. Dr. McDowell argues this question in the affirmative, and proves that it can and has been repeatedly removed entire. He says he has operated *eleven* times with success. We regret to see that the name of Prof. Brainard is not mentioned in this connection. Prof. Brainard has removed the parotid more than once, and written two able articles upon this subject within the last two years—hunting up all well substantiated cases of this operation, nearly a hundred in all. We subjoin Dr. McDowell's method of operating: "I first make a large elliptical incision at the sides of the diseased body, and dissect, cautiously, down on the sides of the gland, always taking care to avoid cutting upon its attachments, but turning the edge of the knife upon the diseased mass until I have dissected it about one-half out; I then pass through the body a large common sail needle, with a strong cord, and give it to an assistant to pull forcibly upon, and then proceed with the dissection cautiously until I come down to the artery where it emerges through the gland above. I then use my thumb and fingers to tear it from its bed, which can easily be done with the assistance of the cord and by running the forefinger behind the artery. But in many instances I have found that the arteries had freed themselves from the diseased mass and were behind it, having forced the body from its bed, and in almost every instance the lower portion of the gland is so soft as to be torn to pieces with ease." . . . "To this condition of the gland I have attributed most of my success in its removal. I

have never cut the body from its bed, but have always found my fingers strong enough to tear it from its position."

Upon the subject of *Ovariotomy*, Dr. McDowell remarks that, in a practice of thirty years, he has never seen a case in which he was willing to operate. This may seem a little singular, when his namesake, and uncle we believe, operated twelve or thirteen times, and has the credit of performing the first operation on record. This claim to honor, however, our author denies to his relative. As this is a point of interest, we quote his remarks: "I hold in my possession testimony which must prove satisfactorily that the credit of the first operation does not belong to Dr. Ephraim McDowell, but to others. In 1808, a lady of Stanford, Kentucky, called on Dr. E. McDowell, to be examined and operated upon by him. He pronounced it a case of ovarian disease, and told her it was incurable, for she must eventually die by bursting of the tumor in the abdomen. She returned home in despair, but having related her case to an old Indian hunter, who in later life had made his living by speying animals, he proposed to cure her, if she would submit to his mode of operation. She said it was but death and she would try it, and accordingly, *John King* opened the abdomen as he would that of a sow or heifer, and the tumor being pedunculated, he passed a ligature around the neck and cut it off, and in two weeks the woman was entirely recovered. Mr. John Camden, of New Orleans, and Peter G. Camden, formerly a mayor of this city, (St. Louis,) both testify to the correctness of this statement.

In 1809,* Mrs. Jane Crawford, who had ovarian disease, called upon *James McDowell*, who graduated at the University of Pennsylvania in 1806, and was then commencing the practice of medicine and surgery in Danville, Kentucky, Dr. Ephraim McDowell having retired to the country. On consultation with Dr. Ephraim McDowell, it was determined to operate, and in the presence of David Cowan, Benjamin Perkins, and others, Dr. *James McDowell* performed the operation, with the assistance of Dr. E. McDowell. Learning the facts, as stated by Cowan and Perkins, I wrote to Mrs. Jane Crawford, whose answer is now in my possession, and is as follows:

'Bloomington, Indiana, August, 1824.

'I received your letter asking me who performed the operation for ovarian disease on me, and all I have to state is that Dr. *James McDowell* did the cutting and the dressing, but Dr. E. McDowell was present and assisted him.'

Dr. James McDowell died in 1812, before a report of the case was made by Dr. E. McDowell, in the *Eclectic Repertory*, of Philadelphia."

In speaking of *Lithotomy*, different instruments and plans of operation are referred to. In the same year that Dr. N. R. Smith invented an instrument for this operation, without knowing what Dr. Smith had done, he says he invented a similar, and he thinks better instrument. "Since 1833 I have operated over one hundred times, and have never failed with it in a single instance. I have operated with Physic's gorget, and found it dangerous, because of the plunge of the instrument; I have operated with the probe-pointed bistoury, and found it impossible to say at the time what I was cutting; I have operated with the scalpel, and have always felt that I was in danger of wounding parts that should be avoided. But with the confined gorget I can feel assured that all is well. When I have passed the ball on the beak of the gorget, I cannot cut any other part than the neck of the bladder, and will not wound any other parts."

He refers to Prof. Brainard's method of treating ununited fracture, and considers it the best plan that has ever been practiced. He also makes favorable mention of Dr. Brainard's plan of treating poisoned wounds by injecting tincture of iodine around the wound. He says of it: "If I were bitten by a rattlesnake or a copperhead, and had the remedies at hand, I would try it, and then *get drunk*, if I could; the latter remedy I have never known to fail." If the *getting drunk* never fails, why practice the injection? He says he would get drunk, *if he could;* is there any doubt about the *possibility* of such a thing? Dr. McDowell concludes his interesting paper with a few remarks upon the treatment necessary before and after operations. Before, instead of bleeding, purging and starving, he says he oftener gives tonics. "I have known patients bled to death to prevent inflammation, when they of necessity died of constitutional irritation or nervous prostration. Give me healthy blood, or a sound constitution in health, and I will insure recovery from surgical operations; but give me vitiated blood, and a perverted, excited, or irritated nervous system, and I will insure a protracted case, or a passport to the grave, the last hiding-place of the judicious surgeon." A mistake is often made in mistaking constitutional irritation for the evidences of inflammation. The former is usually increased by reducing measures.

* We believe Dr. Gross says December, 1809. In Dr. J. T. Bradford's able report in 1859, he says it is well known this operation was in 1808. We think he must be wrong in date, for our author should know, and, as above, he has it 1809.

—o—

SILVER SUTURE OF FRACTURED PATELLA.

Professor Cooper, of San Francisco, writes: "Our method of treating transverse fractures of the patella, and one which has, thus far, been invariably successful, is as follows:—Make a longitudinal incision, of sufficient length to expose the fragments; drill the anterior margins of them with a drill, one line in diameter; then pass a silver ligature through the holes thus made, and, by crossing the ends and pulling stoutly upon them, bring the separated parts together. A knot is then made by twisting the ends of the ligature together, which holds the fractured portions of the patella in apposition, by which a bony union always takes place." As essential to success, Professor Cooper insists that the wound be healed by granulation, and not by first intention. To this end, lint should be placed in the wound, and the limb tightly bandaged from the toes to the middle of the The dressing he would advise to be changed only once a week. At the end of the third week he would omit the lint, but continue the bandage.

The wires should be removed at the end of six or eight weeks. He concludes by saying, "After the operation of applying metallic ligatures in this way, the patient scarcely ever suffers to any considerable extent, and generally remains entirely free from pain during the whole course of treatment; but, in order to have it so, the keeping of the wound open and the application of the tight roller are indispensable."

MORTALITY AMONG INFANTS IN FRANCE.

At a recent sitting of the Academy of Sciences, Dr. Bouchut presented a statistical account of the mortality of children within a period of 20 years, viz: from 1839 to 1859, taken from the registration of the administration of Public Assistance. One of his tables comprises 48,525 children deposited at the Foundling Hospital; another table comprises 24,169 children sent to nurse by the Administration. The principal results at which our author arrives, are as follows:—1. Mortality among children in France amounts to one-sixth during the first year of life, while formerly it was one-fourth. 2. Within the same period, the mortality among males, taken alone, is one-fifth; among females, one-sixth. 3. Mortality is greater among the children of the poor than among those of the rich. 4. Cold weather increases the mortality of newly born infants; and in winter, children cannot without danger, be taken either to the maire or the church. 5. Among foundlings, the mortality is eleven per cent. during the first ten days of life, and fifty-five per cent. within the first year. 6. Dry-nursing, or bringing up by hand-greatly increases the chances of death among foundlings. 7. The mortality among children of the middle classes sent out to nurse is twenty-nine per cent. within the first year. 8. Within that period mortality is greater in the thirteen departments which lie around Paris than in any other department in France, and this is probably owing to the greater number of foundlings they contain, to the want of necessary care by the nurses who receive the children, and to the influence of the endemical disorders that prevail in the capital.

——o——

Indigestion in a Boa Constrictor.—M. Dumeril, of the French Museum of Natural History, says that one of the boa constrictors, which had been in the Museum for a number of years, swallowed a large woollen blanket. At the end of a month the serpent made great efforts to vomit, and succeeded in throwing up the blanket.

The Portrait of Dr. Wm. Hunter is to adorn the gallery of portraits now collecting for the Great Exhibition in London, of next year.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, NOVEMBER 23, 1861.

WAY MARKS OF PROGRESS.

Perhaps there is no branch of medical science in which greater and more rapid progress can be traced, than in that of surgery. Whether we consider the merely mechanical appliances of the surgical art, the instruments used in the various oprations of surgery, or the means now employed to preserve the human body from the mutilations and contortions, so common in past days, the facts will appear patent, that great progress has been made. It is in regard to this latter phase of progress, that we propose, at this time, to dot down a few way marks for the reader.

A boy, twelve years of age, says an English surgeon, came running into my surgery, stating that in chopping wood, he had cut off the top of one of his fingers, at the same time presenting the detached part. I immediately replaced the part, securing it with adhesive strips. Perfect adhesion took place, and he uses it as though nothing had happened. In another instance, says the same surgeon, early in the morning, I removed a sound molar tooth from the jaw of a man who was suffering from facial pain. At night he came back, having carried the tooth in his pocket all day, and requested me to replace the tooth. I did so, and in ten days after, it was perfectly united to the socket by gomphosis.

Says another surgeon, a man forty years of age, was brought to me, the cartilaginous portions of whose nose, with its coverings, had been cut off by a fall upon the fender, in a bar room, and hung only by a minute thread of skin, and this twisted upon itself, so as to arrest any vascular supply to the separated part, which was already very blue, and much below the natural temperature of the body. The raw surfaces were adjusted with silver sutures; the recovery was rapid and excellent, and very slight indications exist of the accident.

In former times such practice would have been ridiculed as consummate nonsense, and the surgeon who should have seriously advocated the readjustment of a severed finger, a nose or

an ear, would have been counted as a fit subject for an insane asylum. That such a power existed in the human system as the *vis medicatrix naturæ* was freely admitted, and to some extent well understood. The early writers talk learnedly and profusely upon it; but it was a genius which presided over the healing of wounds, not of severed parts, which infused vitality and energy into enfeebled organs enabling them to overcome the onset of disease. The idea that this same power would reunite parts long severed; would reproduce a bone removed by the surgeon's instruments, was neither hinted at or suspected. The progress of scientific and experimental research in later times, and within the past few years, have brought to light this fact, and saved many patients from mutilation of body and from a miserable existence. Nor are the cases we have quoted above mere fancy sketches. They are well attested facts. And they clearly show that the power of life—the *vis vitæ*—is not in every case destroyed by separation of one part of the living body from another. The surgeon of former days would have thrown away the severed finger, cut asunder the minute thread which held the mutilated nose to its locality. The modern surgeon readjusts them neatly, assured that if placed *in situ*, nature will reunite them, and restore them to usefulness. So also in the reproduction of bone, the same wonderful power of nature again shows itself, and exhibits in another form the triumph of surgical science. The surgeon of this age does not wait for the long and tedious process, which results in the formation of the bony casement, and the exfoliation and ejection of the dead mass of bone within; but he boldly cuts down upon it, carefully dissects it from the periosteum, cuts it out, and leaves nature, under the influence of proper care and attention, to reproduce the bone itself in its original form. If the bone, be necrosed, become dead, an irritating, offensive substance; be it portions of the maxillary, the radius, the femur, the foot or toe, cut it out, why cumbereth it the system; give nature a chance to do her work anew, take away the irritating cause and nature will show her power to remedy the vacuum the surgeon has produced in her work. It is but a short time since, that M. Maisoneuvé laid before the Académie des Sciences, of Paris, a case in which he removed the entire right tibia (except the articular epiphysis,) of a young man who was laboring under necrosis of that bone. After the fortieth day he was able to walk with crutches, as after an ordinary fracture, and so complete was the reproduction of the bone, that the bad leg in nowise differs from the other, allowing of the most active exercise, such as running, leaping, and the like, without any inconvenience. In a subsequent communication to the same society he narrates the case of a man from whom he removed the whole of the right side of the lower jaw, including its vertical ramus, with the coronoid apophysis, and its condyle, leaving the teeth alone suspended by their gums intact. This occurred in 1854, and the jaw is so exactly reproduced that it is difficult to detect the side on which the operation was performed. So also the reader will find in a late number of the Reporter, a case in which the entire scapula was removed by enucleation from its periosteal investment, and in which the motion of the arm, in process of cure, was surpassingly free in every direction, and the scapula being reproduced. Other equally well authenticated instances might be mentioned to substantiate the same fact. But these are sufficient for our object, and indicate the marked progress in one direction of surgical science.

"DIED OF NEGLECT."

Such was the announcement in a late bill of mortality as one of the numerous causes of death—Neglect! How harshly the word grates upon our ears—Neglect! Died from neglect. Not from surfeiting upon the delicate viands of the rich man's table. Nor yet from eating the bread of carefulness. Not carried to the tomb from the chamber of luxury, where every want is anticipated, and where every wish is more than gratified. Nor yet from the humble yet comfortable dwelling of the middle class, where all the real wants of human nature are satisfied with the substantials of life. Nor yet, perhaps, from the low hovel of the poor, where an affectionate mother could watch over the departing breath, if she could administer no nourishment

to sustain expiring nature. Neglect! Perhaps it was a mother borne down by the infirmities of years, whom an ungracious, ungrateful son or daughter had left upon the banks of the City Ganges, the almshouse or hospital for the poor, to drag out the last days of her existence, with no kind hand to smooth her furrowed brow or catch her dying breath. Or perhaps it was a child, bereft of parents and friends, left to the cold charities of a world too busy with the pursuit of its own phantoms to regard the pitiful moan or the beseeching look. Like the man who fell among thieves, the Priest and the Levite passed by on the other side, casting only a heartless, soulless glance at the object deserving of real commiseration; and yet there was no good Samaritan to bind up the wound, or to pour in the oil of consolation. Neglect! Can we comprehend the heighth and depth, the length and breadth of its meaning? It is not the abscence of the affectionate caress of a loving sister or brother, nor yet of those delicate and fond attentions which a mother or a father can give, nor yet of the tender sympathies of friends or acquaintances. It is not one of these *alone;* it is all combined in one—Neglect! Think of the lonely couch—nay the curbstone, the cold ground, the canopy of heaven the only covering —unattended, deserted by all humanity, and all sympathy: deserted at the hour when the eye sends out its most imploring, beseeching look, to gather some token of commiseration; when the feverish lips would utter their last farewell; left to die, "unwept, unhonored aud unsung." Neglect! Can such inhumanity exist in this day, when men are so full of humanity, so overflowing with sympathy; when hospitals are founded by the munificence of wealthy testators, and public charities go begging for recipients? We christen it *inhumanity*, and what other name more fitting can we apply, when not even woman, last at the cross and first at the sepulchre, whose heart is a well spring of tenderness, affection and sympathy was at the dying couch of these *neglected* ones. Died of "*neglect!*" O whisper it not again. The grave, (*it may not be so,*) the grave has closed over them, the grave of the deserted. Among the ignorant worshippers upon the banks of the Ganges, such acts may be tolerated, because it is among the teachings of their religion. Among the poverty-stricken factory population of England, necessity, stern and unyielding, may compel such obliteration of the sympathies of human nature, in some cases; but in this land there is no such teaching or necessity to palliate or excuse. Died of neglect is *inhumanity*, is BARBARITY.

EDITORIAL NOTES AND COMMENTS.

Dr. Marion Sims in Europe.—The numerous friends and admirers of this excellent and talented surgeon, have heard with satisfaction of the honored attention which he is now receiving abroad. To him alone belongs the credit of the really practical illustration of the universal efficiency of metallic sutures in surgery. Notwithstanding the antiquity of the original use of the wire suture in surgery, until Dr. Sims repeatedly demonstrated that by its use the curability of certain lesions, hitherto abandoned as intractable, was rendered certain, its use was not practiced in modern surgery.

The great advantages of the metallic suture, in its application to vesico-vaginal fistula, and to other indispensable uses, has been, before the profession, so complicated with useless paraphernalia which have accompanied its use, that the fact that all the recent cures of such lesions are alone to be attributed to its unirritating properties, has by many surgeons been lost sight of. The best and most successful operators in this country, now discard buttons, clamps, splints, etc., in these operations, relying on the simple interrupted suture with me-metallic threads.

It is but a few months since some prominent surgeons in this country plainly denied any peculiar value to the wire suture in surgery. Among these, be it known, were some of Dr. Sims' neighbors in New York city, who were within frequent hearing, and had repeated observation of his remarkable success in operations which they would themselves have avoided as hopeless, and have condemned the wretched patient as incurable. Tho proper credit is now, we believe, accorded to Dr. Sims, and it is a gratification to see it honorably acknowledged abroad where an attempt had been made to forestall his claims.

Government Hospitals in the City.—The Government have selected as one of their hospitals in this city, the old silk manufactory formerly occupied by Messrs. Davis & Brother, at the corner of Twenty-fifth and South streets. The building is now being fitted up for that purpose. This is one of the finest positions that could have been selected for such a purpose, affording a fine view, and also plenty of pure air. It will be finished in the course of a week, and will be capable of holding 400 beds, at the least possible calculation. The building is three stories in height, and will contain three principal rooms on each floor, besides bath rooms, store rooms, etc. The bath rooms are placed in the second and third stories. The cooking apparatus will be located in the extreme rear of the building, in close proximity to the servants' department. The rooms will be principally heated by stoves—twenty having been purchased for that purpose. There is but one heater in the building.

In the main rooms three rows of beds will be placed, and in the smaller rooms the number will be according to their size.

Seventeen hundred wounded volunteers are expected to be distributed among the different hospitals of the city, during the present week. Dr. Neil, of the city, it is thought, will be appointed to the charge of the Medical Department. There are already at the military hospital, thirty-six invalid soldiers, from various regiments, who are carefully attended to.

The Wounded at the Belmont Battle.—A writer in a Western paper says:

"On the 13th instant I visited the hospitals, and talked with many of the soldiers who were in the Belmont fight. They are very communicative, and show their wounds with evident pride. Some had their limbs fractured, others their jaws. Some were pierced through the body. What astonished me most was the slight nature of most of the bullet wounds. Several of the soldiers were shot in three and four places, and yet were not confined to their beds. The wounds from the Minie balls can readily be distinguished, by the long conical shape of the cut. The Minie ball generally strikes to kill.

I saw one young man with a most extraordinary wound. The ball entered about the small of his back, pursued its course through a good portion of his body, and came out of his throat; and yet the man sat up with apparent ease, and seemed to me to be but little hurt. Another young man, a bright looking fellow, received a glancing cut from a ball upon the breast, which then glanced upward and cut his throat, not dangerously however."

Many of the soldiers, in this battle, were wounded in the legs and feet, which is explained by the fact that when on their retreat they were compelled to run a gauntlet of fire, between the confederate lines, which lines were so near to each other as to compel the confederates to fire low, in order to avoid killing their own men.

New York State Inebriate Asylum.—On the 20th inst., Dr. Valentine Mott, the president elect of this institution, delivered his inaugural address. In six months, the building will be in a condition it is expected, to receive the patients, provided sufficient funds are received from their friends. Nearly five thousand applications have already been made for admission. We are rejoiced that an asylum for this unfortunate class of our community is about to be opened. The number who have already registered themselves gives frightful indication of the large numbers who are victims of inebriation. But will this asylum decrease the number? Suppose five thousand find shelter and a home within its hospitable walls, are not five times as many more following on rapidly in the same path, rushing onward to the same inglorious end. How shall the tide be stayed? The question is easily asked, but who can answer it?

Philadelphia Blind Asylum.—Among the many excellent institutions with which Philadelphia abounds, we notice none with more pleasrue than this institution for the blind. It is unfortunate to lose any one of the five human senses, but if the loss of one be more calamitous than another, is it not that of sight? And yet it is a wise provision of nature that when one sense is lost the remaining ones are rendered more acute. Hence, the blind are taught by the sense of touch, and their proficiency in reading music, sewing, etc., etc., is astonishing. This institution was established many years ago, by an appropriation from the State, and there are now one hundred and sixty-five pupils attached to it. They are taught pursuits by which they may earn a livlihood when they graduate; have a regular system of instruction, and those who have no home to return to when their education is completed, are allowed to remain here, and are furnished with work, to enable them to meet their expenses. Among the pupils are some persons of mature age, of recent blind-

ness, and there are also three Chinese women, who speak perfect English, and have forgotten their own language. They were brought to this country twenty years ago, by a missionary. The Blind Asylum is on Race street, near Twentieth.

Dr. Hayes' Arctic Expedition.—The expedition of Dr. Hayes is not so barren of results as the accounts of it already published would seem to indicate. He thus sums them up in a lecture before the Geograpical Society of New York. The completion of the survey of Smith's Strait; the discovery of a new channel to the westward of Smith's Strait; the confirmation of Dr. Kane's theory respecting an open polar sea; the determination of the magnetic dip, and of the declination at many points within the arctic circle; surveys of glaciers, by which their rate of movement is determined; pendulum experiments, and hydrographic surveys; a continuous set of meteorological observations; a large collection of specimens of natural history; a valuable collection of geological specimens: the accomplishment of a higher north latitude than ever before attained upon land; and lastly, a large collection of photographic views of the country, icebergs, and of the natives and their settlements. There are thus two hundred photographs of arctic scenery, the same number of sketches, and the statistics of about seventeen hundred miles of coast scenery—results which show that the Doctor's time must have been arduously occupied.

The New Sydenham Society.—This society, which has been in existence nearly three years, has already issued eleven volumes on various medical subjects, besides an atlas of skin diseases, consisting of life-size plates, colored from Hebra's celebrated atlas. The works issued are, of course, all foreign authors, and distributed to the members of the society only. For the sum of $5.25, paid annually in advance, each member has the volumes delivered to him, as they are published during each year. In no other way can a physician add standard works to his library so cheaply. Dr. Richard J. Dunglison, 121 South Tenth Street, is the local secretary for Philadelphia.

Pirogoff's Operation.—As this operation at the ankle-joint has been recommended in an order from the Medial Director of the army, in preference to Chopart's or to amputation above the ankle, it may be interesting to our readers to see a description of that operation, as given by the author himself. He says:—

"I commence my incision close in front of the outer malleolus, carry it vertically downwards to the sole of the foot, then transversely across the sole, and lastly obliquely upwards to the inner malleolus, where I terminate it a couple of lines anterior to the malleolus. Thus all the soft parts are divided at once quite down to the os calcis. I now connect the outer and inner extremity of this first incision by a second semilunar incision, the convexity of which looks forward, carried a few lines anterior to the tibio-tarsal articulation. I cut through all the soft parts at once down to the bones, and then proceed to open the joint from the front, cutting through the lateral ligaments, and thus exarticulate the head of the astragalus. I now place a small, narrow amputation saw obliquely upon the os calcis, behind the astragalus, exactly upon the sustentaculum tali, and saw through the os calcis, so that the saw passes into the first incision through the soft parts. Saw carefully, or the anterior surface of the tendo achillis, which is only covered by a layer of fat, and a thin fibrous sheath, might be injured. I separate the short anterior flap from the two malleoli, and saw through them at the same time close to their base. I turn this flap forwards, and bring the cut surface of the os calcis in apposition with the articular surface of the tibia. If the latter be diseased, it is sometimes necssary also to saw off from it a thin slice with the malleoli."

He thus sums up its absolute and relative merits:—

"1. The tendo achillis is not divided, and so we avoid all the disadvantages connected with its injury. 2. It also follows that the base of the posterior flap is not thinner than its apex, while the skin on the base of the flap remains ununited with the fibrous sheath of the tendo achillis. 3. The posterior flap is cap-like, as in Syme's method, and its form is therefore less favorable to a collection of pus. 4. The leg, after my operation, appears an inch and a half (sometimes even more) longer than in the three other operations (Syme, Baudens, Roux), because the remnant of the os calcis left in the flap, as it unites with the inferior extremities of the tibia and fibula, lengthens them by an inch and a half; and 5. Serves the patient as the point of support."

Vermont Asylum for the Insane.—The twenty-fifth annual report of this institution has just been received. The income for the past year has been $29,704 75, and the expenditures $31,797 24, leaving a balance of $2,091 49

against the institution. The number of patients in the Asylum during the year was 576, of which 128 were discharged; 56 as recovered; 29 improved; 21 not improved; 32 died. Since the opening of the institution 3,308 have been admitted, and 2,807 have been discarged. Of the latter, 1,547, or more than one-half, have recovered. An addition of nearly one hundred rooms has been made during the year, greatly increasing the means of classification and facilities for cure. The superintendent urges friends of the insane to send them at once to the Asylum, whenever insanity is fully developed, as by so doing recovery is more certain. Kindness and agreeable employment are the great moral remedies employed in the treatment. Among the causes which produces insanity, the superintendent especially notices intemperance; and this covers many cases which are attributed to "loss of property," "domestic affliction," "ill health." "Insanity and death," he observes, "are both more liable to be produced at the present time than formerly," on account of the poisonous adulteration of alcoholic stimulants. The institution still remains under the superintendenc of Dr. Wm. H. Rockwell.

The Brooklyn (N. Y.) Medico-Chirurgical Society, their First Annual Re-union.—This Society, formed after the manner of the Societé Médicale d'Emulation, of Paris, celebrated its first anniversary on the 11th inst., by a dinner at the Pierrepont House, Brooklyn. The members of the Society were present in full numbers, besides many invited guests of the theological, legal, and medical professions.

At eight o'clock the chair was taken by Dr. Daniel Ayers, the President of the Society, who neatly welcomed the guests to the festive board, richly laden with the viands, delicacies, and fruits of the season. Upon the removal of the cloth, several gentlemen were called upon to respond to the "sentiments" of the occasion. Rev. Dr. Guion answered for the clergy, and suggested that while the theologian went before the physician generally, yet the former sometimes came behind the latter, too often, he feared, to cover up at the grave the sad evidences of professional unskillfulness. This sally was too general for personal application, and so passed off with good humor. Dr. Bauer responded in patriotic terms to "our country." Its starry flag had gladdened the eyesight of his youth, in the foreign land of his birth, and had pointed to him the United States as the "land of the free and the home of the brave," but more, as that destined to be the emporium of art and science. Dr. Sayres congratulated Brooklyn upon her progress in population, the Society for having done so much for medicine and humanity, and individual members for their original and successful operations, without a parallel before in surgery and medicine. Rev. Father Fransioli spoke feelingly to "charity," and dwelt upon the moral and religious duty of cultivating the divine graces of charity towards the poor, the friendless, and destitute. The speech of the evening, however, was from Dr. McPhail, on "Medicine as a Science," from which we shall make some extracts in future. The occasion was a pleasant one, and passed pleasantly away.

REVIEWS AND BOOK NOTICES.

Lectures on Materia Medica and Therapeutics, delivered in the College of Physicians and Surgeons of the University of New York, by John B. Beck, M.D., late Professor, etc., prepared for the Press by his friend, C. R. Gilman, M.D. Third Edition. New York: S. S. & W. Wood, Publishers. 1861. Price $3, free of postage.

The receipt of this book is like greeting an old friend, or a long familiar face. More than twenty years ago, we pored over its contents, drinking in the instruction with which its pages were richly freighted. It was our guide in the administration of remedial agents. It was our instructor in the indications of treatment, in the circumstances modifying the operation of medicines, in the philosophy of the Materia Medica. We turn over its pages and all seems familiar as household words. The arrangement, the matter, the style, the attractions are all the same. The hand of improvement, the march of science, which has made such sad havoc with Cullen and Brown, and Thomas, laying them quietly away upon the shelves of the antiquary as curiosities, have not laid their rude hands on this work. Here it is just as we studied it. Even the paper on which it is printed has not bleached out to whiteness, or improved in texture by the progress of years. And yet in it we find an occasional omission of some more obsolete ideas; here and there a note is added by the editor in brackets, which only indicates how scrupulously careful he is to preserve intact the original thoughts of his learned contemporary, and to impute nothing to him he did not utter. The author was "not a runner after new things," nor was his work intended to chronicle every "new remedy" that might be placed before the public. He chose to deal with the fundamental *principles*

of Therapeutics, to indoctrinate his pupils thoroughly into the best means of putting those principles into practice. And so tenaciously did the author cling to this original intention, and so scrupulously has the editor of the work carried out this idea, that the student will look in vain, in its pages, for the "new remedies" which the research of later years has brought to the notice of the profession. And yet the lapse of time has only served to confirm the truth and increase the value of the great *principles* which constitute the distinctive merit of the work. The work of Dr. Beck is the standard, the great text-book upon the subject of materia medica, and the fact that a third edition of it is now demanded is evidence that the principles which should guide the practitioner in the administration of remedial agents are becoming more settled, and in a good degree certain.

Lectures on the Diseases of Women. By Charles West, M.D., Fellow of the Royal College of Surgeons of England, etc., etc. Second American from the Second London Edition. Philadelphia: Blanchard & Lea, Publishers. 1861.

This is the second edition of a standard work on the diseases of women, and is the production of the conscientious, practical physician, who enunciates his opinions with great caution, and takes care to fortify them with arguments which tend to carry conviction to the reader. His views and opinions may not always coincide with those of the present day, but they are uttered with so much candor and sincerity, and with a desire so apparent to teach only those doctrines which the investigations of pathology and therapeutics shall fully justify, that he throws around the unprejudiced student a fascinating charm, which compels admiration and respect, if it does not command entire credence. Of this character, for example, are his remarks upon the use of the speculum, and upon ulcerations of the cervix uteri. In relation to the former, while he holds "the speculum to be in many cases of most essential service," he, at the same time, delicately insinuates that its general and frequent use should be discountenanced as unnecessary and even tending to immorality, and suggests "that the endeavor of us all should be to ascertain the minimum of frequency with which its employment is necessary." So also in regard to the latter, while he points out with all the minuteness of thorough pathological investigation, the chief characteristics of the ulcerations or abrasions of the os uteri, and recognizes the importance of their proper treatment when actually existing, he carefully guards the student against the error that uterine ailments have this one invariable cause, or are the results of this one constant pathological occurrence, viz. ulceration of the cervix. Such simplification of uterine pathology leads to a like simplification and error in therapeutics. Be the duration or severity of the disease what it may, there is in this view but one unfailing indication of treatment "to modify the vitality of the part by caustics," and this accomplished the entire malady infallably disappears. All other remedies are but secondary and subservient to this, and the great point of discussion among these "one idea" uterine pathologists is, what caustics to use, how often, and how shall the inconveniences which sometimes result from their employment be obviated.

Against such views Dr. West argues with great force and ability. Ulceration of the cervix is not always present in uterine disease; the symptoms ordinarily attributed to that condition, are met with independently of it, almost as often as in connection with it; "women of the same age, in similar circumstances, present the same symptoms, leading to the same results, having the same duration, and attended with similar structural changes whether such ulceration be present or absent." He, therefore, infers "that ulceration of the womb is neither a general cause of uterine disease nor a trustworthy index of its progress." And as a further inference that the application of local remedies, is not the all important object in the treatment. Morever the local treatment, which consists in the application of caustics to the cervix, he alledges, is sometimes mischievous, not unfrequently resulting in an inflammation of the uterus and its appendages; it has neither the merit of acting *cito*, nor *jucunde*, nor yet *tuto*.

But space forbids extending our notice. The same clearness aud force of reasoning, the same calmness of judgment, the same earnest desire to teach the truth and it alone, the same thorough pathological investigation, and candid enunciation of the treatment these investigations direct, characterize the whole work, and we commend it the student as a safe and invaluable guide.

—o—

Mr. Simon Rood Pittard, "one of the best and most estimable sons of Medicine," of England, died lately at Sydney, New South Wales, whither he had gone to take the Curatorship of the Australian Museum. He died without leaving his family a competence for their support, and the assistance of the profession is solicited in their behalf.

The number of Students in the Prussian Universities, for the last winter session, was 825; viz., 721 Prussians, and 104 foreigners.

The distinguished Military Surgeon, Gaspard Leonard Scrivi, Chief Inspector of the French Army, has just died at Val-de-Grace, at the age of 46. He was Surgeon in Chief during the Crimean war, and has left an interesting surgical relation of that campaign.

Correspondence.

BOSTON CORRESPONDENCE.

Meeting of the Medical Improvement Society—Discussion—Interesting Cases Reported—Paper by Dr. J. C. White on Leukosin in the Blood—The Free Hospital—Case of Dreaming

Boston, November 13th, 1861.

Since my last letter but little has come up of an unusual character. Another regiment of the stalwart defenders of the Union has gone to the scene of strife, and we have been alternately hopeful and depressed as the tidings of the naval expedition gave promise of its success or foreboded its failure. The Medical Improvement Society held its meeting on Monday evening last. There was quite a full attendance. A case of obstinate stricture was reported, which was relieved by the passage of very fine bougies after every other means had failed. This led to quite a lengthy discussion upon strictures, and the best method of relieving them. Dr. Warren remarked that in cases of pure spasmodic stricture, the administration of sulph. ether would almost invariably relax the spasm, and permit the passage of urine even without the aid of the catheter, but there was a large class which required treatment both local and constitutional. Instances were quoted of the practice in foreign hospitals. It was better, generally, to use larger instruments instead of small sized, and even when the stricture could not be dilated, it often was enough to pass a large sized bougie down to the constricted portion, exert as much pressure upon it as was safe, and then suddenly withdraw it. The urine would in many instances immediately follow. Two fine specimens of rupture of the aorta, near its exit from the pericardium, were shown, and by one of those coincidences which occasionally happen they both came under the notice of the reporter within twenty-four hours. They were the only ones also that had been seen for a long time. The direction of the rupture in one specimen at its internal aspect was transverse, and the blood in its exit had split the coats of the vessel for many inches towards the diaphragm and then reentered the artery. The pericardium was full of coagulated blood. The patient first felt a dull heavy pain in the region of the liver accompanied with a good deal of nervous irritability. An affection of the liver was diagnosed, and treated, but on getting up suddenly, a fainting fit came on, and before any medical attendance could be summoned death ensued. The other case was that of an aged negro woman. In this case like the former, the coats of the artery were separated, and great hemorrhage had taken place. In both, the coats of the artery were diseased. An interesting specimen was shown of diseased lung opening into the cavity of the pleura, producing pneumo-thorax. The disease was in the lower lobe, and had discharged about three pints of purulent matter into the pleural cavity. Dr. Jeffries Wyman showed a rare specimen of anchylosis of the cervical vertebræ, accompanied with so much displacement of their relation to the atlas as to diminish the calibre of the canal one-half. It was from a dissecting-room subject. The adaptation of the parts to the altered condition of things was very remarkable. Whether the malformation was the result of disease or accident it was impossible to determine. Dr. W. remarked that there were but four or five well authenticated cases of this lesion. In a preparation in one of the museums of London, the calibre of the spinal canal was diminished to less than one-quarter of an inch in diameter. It seemed almost impossible to reconcile the idea of life with such diminution of the spinal cord. A paper was read from Dr. J. C. White, in which he brought forward corroborative proof, from two recent cases of leucocythemia, that the substance he had found in 1859, in the blood of a patient dying of this disease, and to which he then gave the name of *Leukosin*, was not an accidental substance, but a material existing in the blood in consequence probably of the disease, and which makes its appearance after the blood has been a short time out of the body, as do the urates in the urine. Dr. Ellis showed a substance which had been sent to him for examination and verification. It was reported to have been taken, after considerable manipulation with instruments, from the uterus of a patient, by a uterine quack, and exhibited as a tumor of that organ removed from its interior. It proved to be a kidney, of some animal probably, from its characteristics, and had been macerated in alcohol. Sharp practice that!

Our Free Hospital seems destined to be a bone of contention. Who are the ones really interested in the matter—whether the architect, or the original proprietor of the idea, or the Committee of the City Council, it is a very pretty quarrel as it stands. How fortunate it is that in such emergencies, individuals come forward who are willing to stand sentinel on the walls of the public crib, and see that none but the saints go in to feed.

I send you a case of dreaming. I took down the facts in writing at the time, but have held it back until now. The narrative is true, however much we may doubt the conviction:

Mr. and Mrs. ——, with a sister of Mrs. ——, left for a journey to ——. Their only child, a boy between two and three years old, was perfectly well at the time and put in charge of friends. On Thursday night, while at a hotel, not having heard from home at all, and when sleeping with her sister—the hotel being so full this was necessary—she awoke her sister

with the remark, that she had had a terrible dream about her son. That she seemed to see him lying in a crib, and a woman, with very grey hair, whose face she knew, but not her name, was bending over him, and that he was very sick. This happened twice, but was, of course, attributed to a mother's anxiety, it being the first time she had ever left her boy, and nothing more was said about it. The mother, however, determined to return home, but before they could start the next day a message reached them with the intelligence that her boy was sick with dysentery, and the added evil of teething, and not expected to live. They immediately started for home, but did not reach it until after the child's death. When they arrived at the house, a carriage stood at the door, into which was just entering a woman, who was the counterpart of the one seen in the dream. She was a nurse, much respected in the neighborhood, and whom Mrs. —— had frequently seen, but did not know personally. When the child was taken sick, she was sent for and attended the little sufferer till he died. Her appearance was peculiar from the large quantity of her grey hair.

TRIMOUNT.

NEW YORK CORRESPONDENCE.

Ad humum mœrare gravi deducit et angit.—HORACE.

MESSRS. EDITORS:—While many of our most energetic citizens have been laboring for the welfare of humanity in general, and, confining themselves to one branch of charitable duty, have sought to ameliorate the condition of brother sufferers, a twofold actor on the stage of life strove in a double capacity—as medical adviser and religious expounder—to relieve the ailments of the body, and, at the same time, bring comfort to a saddened soul.

A talented and cordial son of our respected Alfred C. Post, M.D., has, for years been engaged in that most noble of all professions, the pastor's round of excellencies. Many first drank in a hopeful solace from his cheering voice; others, some renewed their Christian zeal while listening to the soundest principles enunciated from his purified discourses.

Loved, honored and revered, the Rev. Dr. Post, æt. 27, lived; regretted and exalted by his holy death, he passed from the rude agencies of this dull world into the realms of bliss and purity. Those who were acquainted with his inner self, know the bitter anguish of his family, and fail not to assert with vehemence and tears—

"'Tis better to have loved and lost,
Than never to have loved at all."

The Pathological Society, now presided over by Dr. Alfred C. Post, maintains its interest and wonted vigor. At every session the sad ravages of hidden tumors and concealed abnormal growths unfold to those desirous of deriving salutary precepts from the consequences of uncertain symptoms, the causes that have led to unexpected ends. Besides a proper knowledge of anatomy in healthy structures, the young student should acquaint himself with any changes from the true structure of a given part. I trust that ere many years shall pass away, some rich doctissimus will form a moneyed nucleus that may bud forth into a well-developed building, that shall have a single name and object, together with a monthly record of discussed and illustrated cases. New York is large enough to have an independent Academy of Medicine and Pathological Society.

An anecdote that has a moral point may be received by even go-a-head physicians. In the latter part of April last, while companies were being formed, and preparations for campaigns were occupying the attention of the cities of our flag, a lady waited on me to obtain advice relative to rolling bandages and scraping lint, for those poor soldiers who might be in need, from wounds, of kind and charitable assistance. Being duly instructed, she departed, full of zeal. Within twenty-four hours after her visit I was called in haste to administer to her own wants. An accidental fall had resulted in her arm being caught on a spiked iron railing, almost directly over the brachial artery. The point is, that the first person who "derived comfort and relief" from the bandages and lint, already made for present use, was this same charitable lady.

To those who meditate on compensations, and the bright rewards that follow each kind act, this truthful statement must prove pleasing. For the hollow-hearted money-getters who are linked to our glorious profession, I have nothing to express; their incapacity to comprehend the sentiment wraps them up sufficiently in proud conceit.

GOURMET.

ARMY CORRESPONDENCE.

Epidemic Catarrh in Camp.

CAMP HAMILTON, FORTRESS MONROE, VA.,
November 18, 1861.

An epidemic of influenza, marked by the following symptoms, greeted our Regiment upon its arrival at this military station. The Pennsylvania 48th was then experiencing the effects of its visitation.

Severe pain in the frontal regions was almost invariably present. Sometimes this pain extended over the entire head: pain in the lumbar region, which in the absence of other symptoms would have caused one to suspect lumbago; a general sense of aching in the limbs, much

like that one is accustomed to meet with in a bilious district of country; bowels almost always relaxed, and the discharges accompanied with tenesmus stools, sometimes clay-colored, at others watery, and frequently bloody, or mucus mixed with blood; in some cases, a disposition to go to stool every half hour or hour was manifest.

In addition, there was tenderness over the abdomen; considerable soreness, which proved itself upon pressure. Some had pains in the arms, which simulated rheumatism; others had pain in the neck, with a certain degree of stiffness. The aching sensations increased, in the majority of instances, at night, and wore off a little during the day. Acidity of the stomach, in many cases, was an accompaniment. The tongue was invariably furred; there was either a white or yellow coat.

As to the catarrhal symptoms, the discharge from the nose was not generally profuse; eyes not very watery; a sense of fulness at the root of the nose. Oftentimes there was a cough, which continued for days. In many, the fauces were inflamed, tonsils reddened, and uvula elongated. Some were troubled with uneasy feelings in the chest, with slight spitting of blood. There was little febrile irritation, but great debility.

The epidemic continued more than two weeks, in which time a large portion of the Regiment suffered from it more or less. At one period, thirty-five cases a day presented themselves. There were no fatal cases, the disease not being very grave in its character. Some relics of the epidemic are yet observed, though nearly a month has elapsed since we came here.

In consequence of the necessary exposure of the men in their tents, on the damp ground, the treatment pursued at first by us was not such as we should have adopted if hospital accomodations had been available. The affected ones were obliged to sleep for the most part without boards or straw under them. Under these circumstances, and in a moist atmosphere, it was unsafe to resort to diaphoretics. But very soon we occupied a large and suitable building as a hospital. The treatment, in many cases, was expectant merely. In some, the alkalies were indicated by the oft present acidity. The tongue frequently demonstrated the necessity of mercurials; the compound cathartic pills were employed not a little; cholera morbus or colic sometimes existed along with the other symptoms. Dover's powders were given at bedtime; carbonate of soda and tinct. opii. for the laxity of the bowels. In many cases quinine had to be employed, the debility was so great, and convalescence tedious. No specific plan was pursued, for the symptoms were so numerous, and the complications so varied, that the treatment had to be almost as varied.

D. W. Maul,
Surgeon 1st. Reg. Del. Volunteers.

NEWS AND MISCELLANY.

Brief Notices of Pamphlets Received.—Valedictory Address to the Graduating Class of the Female Medical College of Pennsylvania, by Dr. Edwin Fussel. *Thoughts on the Prevalence of Quackery*, by Dr. J. R. Black, Hebron, Ohio. The "thoughts" relate to the prevalence of quackery, and its causes, but not to a far more practical and important question, how shall the evil be remedied? *Godey's Lady's Book*, *The Atlantic Monthly*, and *Harpers' Monthly*, for December, have also come to hand.

Dr. R. B. Mershon, of Newark, N. J., has been tendered the appointment of Surgeon in the "President's Guard," a regiment now being raised for special service in the city of Washington.

Vicarious Hemorrhage into the Anterior Chamber of the Eye.—The *Lancet* says that M. Guépin records the case of a girl who had menstruated regularly, but every period had been followed by an attack of epistaxis. Recently the catamenia lasted only two days, the epistaxis did not come on, but the anterior chamber of one eye became filled with blood.

Medical Misfortunes in America.—"Manhattan," the correspondent of the *Standard*, describing a visit to a Lunatic Asylum, says:—"After we had seen most of the females, we passed into the building devoted to the male maniacs. Almost the first man my eyes lighted upon was an old friend, Dr. H———, who, singularly enough, was at one time the head of the Bellevue Hospital, and had thousands under his charge. No one was more respected. He left medical life, and started a paper at Fishkill. A few months ago the mob went to his office, and dragged him out, on account of a secession article that had appeared in the columns of his paper. The effect has been terrible. He is a hopeless maniac, but harmless. He sits upon a bench, looking an object of despair. He gazes wildly in the direction of a voice, but makes no reply. He is unconscious of anything. He is but one out of thousands of families that this rebellion will bring to misery in the North and South. The next case was Professor D——, analytical and consulting chemist, and one of our most promising citizens."—*Med. Times and Gazette.*

Death of Dr. Brereton.—This gentleman died at his residence, Harcourt street, Dublin, on the 2d inst. Dr. Brereton, who was in his sixty-second year, was a Doctor of Medicine of Edinburgh University, and Fellow of the King and Queen's College of Physicians, in Ireland, and had formerly filled the offices of physician to the Sick-poor Institution, Meath street, and the Kevon street Fever Hospital. We understand that the immediate cause of his death was hydrothorax.—*Dublin Medical Press.*

Amount of Army Rations Per Month.—The following figures show the amount of commissary stores which will be consumed in one month by the United States army when brought up to the standard authorized by Congress, viz: 500,000 men. It will be seen that the labors of the commissary department are anything but trivial, and that the cost of feeding an army is a somewhat serious item.

11,250,000 pounds of pork, or 18,750,000 pounds of fresh beef; 105,380 barrels of flour; 37,500 bushels of beans, or 1,500,000 pounds of rice; 1,500,000 pounds of coffee; 2,250,000 lbs of sugar; 150,000 gallons of vinegar; 225,000 pounds of candles; 600,000 pounds of soap; 6,384 bushels of salt, and 6,600,000 pounds of potatoes.

—o—

Sydney Smith on Fashionable Physicians.—"There is always some man of whom the human viscera stand in greater dread than of any other person, who is supposed, for the time being, to be the only person who can dart his pill into their inmost recesses; and bind them over, in medical recognizance, to assimilate and digest. In the Trojan War, Podalirius and Machaon were what Dr. Baillie and Sir Henry Halford now (1818) are,—they had the fashionable practice in the Greek camp; and, in all probability, received many a guinea from Agamemnon dear to Jove, and Nestor the tamer of horses."

Hydropathy.—"Such strong and enthusiastic testimony has been borne to the value of Hydropathy by highly educated men, who have chronicled their sensations, that we must, perforce, give credence to the efficiency of that system. Yet ever and anon a shadow of skepticism steals over our mind, for the practice of packing in wet sheets does not tally with our preconceived ideas, or quite reconcile itself to our reason. It is said that by this process all impurities are brought out through the pores of the skin, and what are called crises are superinduced; and we have heard more than one excellent person assert with exultation that after a tight course of packing and asperging they have brought forth as fine a crop of boils and blains as could have been exhibited in Egypt during the prevalence of the plague. Notwithstanding all this, we think that one cold bath in a morning is as much ablution as is good for a man."—*Meditations on Dyspepsia, in Blackwood for October.*

The Patient's Opinion of Doctors."—"We delight in doctors, who are the best friends of frail humanity, and the least quarrelsome fellows you can meet with anywhere, except when they wrangle among themselves. No other class of men enjoy life with so keen a relish, or are as indefatigable in their efforts to promote the happiness and welfare of mankind. They are, too—we say it in all seriousness—the most disinterested of mortals; for, although disease is their harvest, we find them always true and faithful monitors, warning us against the evil habits that tend to the destruction of health; and if we were wise enough to profit by their maxims, to live rationally, and to avoid all manner of excess, few would be the fees accruing to the successors of Machaon and Podalirius."—*Ibid.*

MARRIED.

Budd—Pennell.—On Tuesday, Nov. 19, in St. Ann's Church, by the Rev. Thomas Gallaudet, assisted by the Rev. F. C Ewer, Charles A. Budd. M.D., to Mary Elizabeth, only daughter of the late Richard Pennell, M.D., all of New York city.

Hitchcock—Mack.—At New Haven, Conn., Novemyer 19th, by the Rev. S. W. S. Dutton, D.D., H. M. Hitchcock, M.D., of New York, to Mary A. daughter of the Rev. E. T. Mack, of New Haven.

Royer—Hoover.—On Thursday evening, Oct. 3d, by the Rev. U. W. Small, Moses M. Royer, M.D., formerly of Lebanon, Pa., to Miss Lizzie Hoover, formerly of Martinsburg, Pa., all of Sterling, Ill.

Norris—Tobin.—In Brooklyn, E. D., on Thursday, the 14th of November, at the Church of St. Peter and Paul, by the Rev. S. Malone, Thomas P. Norris, M.D., to Miss Mary A. Tobin.

Answers to Correspondents.

Dr. L. W. P, Pa.—The price of Gross Surgery is $12; of Carpenter's Human Physiology, $4 25. You can order them through us if you choose.

Dr. J. Q. A., N. Y.—Churchill's syrup of hypophosphites which is extensively advertised in the papers as made and sold by an empyric in New York, is probably a simple solution of the hypophosphites of lime and soda with sugar, the former of which as preferred by Dr. Churchill, who originally introduced these salts, is used in the largest proportion. The published formulas for these preparations are all contained in Parrish's Practical Pharmacy, where some twenty pages are devoted to the compounds of phosphorous used in medicine.

From this source, we extract the following formulas—syrup of hypophosphites.

Take of hypophosphite of lime, oz. i ss.
" " " soda, oz. ss.
" " " potassa, oz. ss.
Sugar, lb. j. 12 oz.
Hot water, oj. f. oz. iv.
Orange flower water, f. oz. i.

Make a solution of the mixed salts in the hot water, filter through paper, dissolve the sugar in the solution by the aid of heat, strain and add the orange flower water. Dose, a teaspoonful containing nearly five grains of the mixed salts.

Syrup of hypophosphites contalning iron.

Take of hypophosphite of lime, 256 grains.
" " " soda, 192 "
" " " potassa, 128 grains.
" iron recently precipitated, 96 "
Hypophosphorous acid solution, 240 "
White sugar, 9 ounces.
Extract of vanilla, one-half ounce.
Water, a sufficient quantity.

Dissolve the salts of lime, soda, and potassa, in six ounces of water, put the iron salt in a mortar, and gradually add solution of hypophosphorous acid till it is dissolved, to this add the solution of the other salts after it has been rendered slightly acidulous with the same acid; and then, water, till the whole measures twelve fluidounces. Dissolve in this the sugar with heat and flavor with the vanilla.

Dr. J. W. B., Ill—The Reporter for one year, and Physician's Hand-Book of Practice for 1862, will be sent to your address for $3 60, paid previous to Jan. 1862. The Hand-Book contains in addition to the practical part, a Visiting List for some thirty patients, and sells at retail for $1 25 per copy. Subscribers to

the Reporter gte the book therefore for less than half what it will cost them if they buy it at the book stores. Or we will send you the Reporter and "Physician's Visiting List" for 25 patients, the retail price of which is 75 cents, for $3 40, paid within the same time. These terms are exceedingly liberal, and we hope will induce you not only to subscribe for the Reporter yourself, but to commend it to others. tf.

Communications Received

Delaware—Dr. Knowles. *Illinois*—Dr. M. M. Royer, with encl.; Dr. C. A. Paul. *Maryland.*—Dr. J. K. Birkebile. *New Jersey*—Dr. Jos. S. Cook and Dr. Chabert; Drs. Kudlick, W. L. Perine, Kopctschny, and Carels, each with encl. *New York*—Mr. J. G. White, Drs. G. V. Newcomb, E. V. Colt, D. K. McDonogh, Jno. A. Brady, L. K. Snell, Rob't Cooper, E. Malone, S. N. Palmer, E. Devendorf, S. Wade, C. Alcott, C. Prince, C. S. Whitehead, F. M. Ingraham, W. K. Gleason, Peter Burnett, J. G. Johnson, W. J. Haddam, C. G. Framton, A. H. Turner, H. Hesler, W. H. Hunter, E. M Brown, D. A. Hedges. O. H. Smith, Ostrander, each with encl.; Drs. L. C. Hassel, C. J. Chase, and H. Teller; Dr. C. C. Barnett, with encl.; Drs. F. G. Basora, F. P. White, S. D. Willard, and S. W. Francis; Dr. J. Swinburne, with encl.; Drs. G. K. Smith, S. G. Carpenter, J. B. Richmond, and H. Hernstreet; Dr. H. B. Horton, with encl.; W. A. Townsend, S. W. Francis; Dr. L. D. Isham, with encl.: Drs. W. V. V. Rapage, C. P. Bronson, W. C. Livingston, N. C. Husted, S. Teets, S. H. Brown, J. H. Hoysraat, D. Biette, A. J. Fitch, A. Hodgman, A. S. Jones, O. O. Burges, W. Roberts, J. Healy, E. S. Nichols, L. Lambert, J. H. Joechen, C. Johns, B. W. King, and H. Sherril, each with encl.; J. MacNichol, Drs. Newcomb, W. Knowlton, W. H. Bailey, L. G. Warren, S. H. Freeman, H. D. Paine, P. P. Staats, Mosher, Babcock, Van Hoosen, C. H. Smith, W. H. Bigelow, E. Weber, H. G. Adams, Stone, C. S. Woodruff, S. W. Hall, Brion, W. S. Cooper, R. S. Hamilton, H. C. Murphy, and J. P. Wittbeck, each with encl. *Pennsylvania*—Drs. S. F. Chapin, A. Dimmick, W. Hays, Breitenbaugh, J. J. Comfort, R. McChesney, Dr. H. B. Buck, and J. H. Dickenschied, each with encl. *Rhode Island*—Dr. W. Cook, with encl. *Wisconsin*—Dr. C. L. Stoddard, with encl.

Office Payments.—Drs. MacIntosh, B. Hart, McRean, Kirkbride, Brandes, Witmor.

Errata.—On page 152 of last number of Reporter, fourth line from top of first column, read "*root*" instead of "*not.*"

VITAL STATISTICS.

Of Philadelphia, for the week ending Nov. 16, 1861:

Deaths—Males, 142; females, 112: boys, 67; girls, 57—Total, 254. Adults, 130: children, 124. Under two years of age, 55. Natives, 179; Foreign, 55. People of color, 10.

Among the causes of death we notice—Apoplexy, 3; convulsions, 11; croup, 4; cholera infantum, 1; cholera morbus, 0; consumption, 39; diphtheria, 11; diarrhœa and dysentery, 6; dropsy of head, 4; debility, 9; scarlet fever, 22; typhus and typhoid fever, 9; inflammation of brain, 3; of bowels, 4; of lungs, 8: bronchitis, 0: congestion of brain, 3; of lungs, 3; erysipelas, 0; whooping cough, 0: marasmus, 6; small pox, 8.

For week ending November 17, 1860.....200
" " " 16, 1861.....254

Of Brooklyn, for the week ending, Nov. 16, 1861:

Deaths—Males, 63; females, 39. Total 102. Under five years, 46.

Among the causes of death we notice—Consumption, 18; scarlet fever, 12; convulsions infantile, 11; inflammation of lungs, 7; debility, 5; marasmus, 3; croup, 3; bronchitis, 3; dropsy, 3; diphtheria, diarrhœa, erysipelas, typhoid fever, measles, small pox, each one.

Of Providence, R. I., for the month of October:

Deaths—Males, 36; Females, 48. Total, 84. Natives, 65; Foreign, 19. Under one year 31.

Among the causes of death we notice—Abscess, 2; anæmia, 1; disease of brain, 2; inflammation of brain, 1; bronchitis, 1: cancer, 3; cholera infantum, 6: consumption, 11; croup, 3; debility, 2; diarrhœa, 2; dropsy, 2: dysentery, 7; diphtheria, 2: typhoid fever, 1; disease of heart, 3; hydrocephalus, 3; intussusception, 1; intemperance, 4; delirium tremens, 1; disease of kidneys, 1; inflammation of liver, 1; marasmus, 5; neglect, 2; pneumonia, 2; scarlatina, 1.

Medical Directory.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr. Gerhard.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Medical Library of the Pennsylvania Hospital—Open on Wednesdays and Saturdays.

Philadelphia Hospital.—Medical Clinic on Wednesdays and Saturdays, at 9½ A.M., by Dr. J. L. Ludlow.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A. M., by Dr. D. H. Agnew.

Wills Hospital for the Eye and Limb.—Clinics, Monday and Friday at 12 M., by T. G. Morton, M.D.

Howard Hospital, Lombard street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P. M. Monday and Thursday—Dr. Turnbull, at 1 P. M. Tuesday and Friday—Dr. Darrach, at 12 M.: Dr. Klapp, at 5 P. M. Wednesday and Saturday—Dr. Neff, at 12: Dr. Judson, at 1, and Dr. Morehouse, at 5 P. M. Monday and Thursday—Dr. Meigs, at 5 P. M. Tuesday and Friday—Dr. Atkinson, at half-past 3 P. M.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesday's and Saturday's, at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street—Clinical Lectures, daily, (except Sunday,) from 2 to 4 P. M., by Dr. Goodwillie.

Philadelphia Lying-in Charity.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning at 9 o'clock, by Dr. Albert H. Smith.

CONNECTICUT MUTUAL LIFE INSURANCE COMPANY.

HARTFORD, CONN.

Accumulated Capital over $4,000,000.

JAMES GOODWIN, President. G. R. PHELPS, Secretary.

OFFICE IN PHILADELPHIA: 404 WALNUT STREET.

This Company, incorporated in 1846, on a system entirely Mutual, furnishes Insurance to the policy holder at the Actual cost. There is no Stock or Guaranty Fund to absorb the profits, but *all the profits* are *annually* credited to the policy holders, and may be appropriated to the payment of premiums after the first four years.

It offers *abundant* Security in an accumulated Fund, derived from premiums, amounting to more than

FOUR MILLIONS OF DOLLARS!

Its economy in the management of business have permitted dividends to policy holders, which have averaged *5o per cent. per annum.* It has thus divided in profits among the insured nearly Two Millions of Dollars.

It is prompt in Payment of Losses. It has paid more than Two and a-half Millions of Dollars, for losses by death, and in no instance has payment been delayed beyond the time it was due.

It accommodates the insured on *Life* policies by receiving a note for *one-half* the premium when it amounts to fifty dollars or more, thus furnishing insurance for double the amount, for about the same *cash* payments as is required by most other companies, while the dividends are applied to cancel the notes. Parties, however, if they prefer, may pay all cash, in which case the dividend will be paid in cash.

Applications for Insurance received, and Pamphlets, and every information in regard to the business, furnished on application, by mail or otherwise, to

WADLEIGH & TILDEN, Agents,
404 WALNUT STREET,
Philadelphia.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 267. PHILADELPHIA, NOVEMBER 30, 1861. NEW SERIES, VOL. VII. NO. 9.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the Best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

By a Hospital Surgeon of Philadelphia.

(*Continued from page* 151.)

GUN-SHOT WOUNDS OF THE EYE.

According to Cooper* "gun-shot wounds of the eye, whilst presenting many points in common with injuries from other foreign bodies, possess characteristics entitling them to separate consideration. A shot striking the eye may cause simple bruising and concussion, or it may glance off, cutting a groove without penetrating; it may pierce through the tunics (showing no mark as we have stated before) and lodge in the globe; or lastly, it may traverse the eye and bury itself in the orbit. The effect of a spent shot is generally to produce concussion of the retina and subconjunctival ecchymosis."

When the surgeon is summoned, the first thing to be done is to ascertain, if possible, the relative position of the injured and injuring parties when the accident occurred; carefully cleanse the eye, and make as full an examination as possible. The following points are to be considered (from the authority before quoted) in determining the question as to whether or not a shot has pierced the eye; "the weight of the shot, the distance from which it was discharged, the position of the eye, and the direction whence the shot came. A heavy pellet will plunge into the eye at a hundred yards, when a light shot would glance, or fail to enter at fifty. The more obtuse the angle of incidence, the less the chances of the shot penetrating. The elasticity of the tunics is such, that a round pellet, direct from a gun, may be thrown off, when an angular or jagged shot, rebounding from a stone, will tear through them, and the laceration within the eye will depend on the size, shape, and force of the shot."

A guarded prognosis must in all cases be given by the surgeon, as often a slight grazing or spent shot, may by its concussion, detach the retina, and cause hopeless amaurosis, and when a shot has penetrated the eye, the risk is always grave. Occasionally the shot will simply pierce the cornea, and dropping into the anterior chamber, can be extracted without difficulty, but such cases are rare. The ordinary treatment is removal of the shot if possible; leeches freely applied and cold lotions. Internal treatment—calomel, with opium, or morphine, while soft extract of belladonna is applied around the eye if the iris is at all inflamed; rest in a darkened room, and liquid diet.

Military surgery presents cases of wounds of the eye peculiar to itself; the globe may be torn out of the socket, or it may be lacerated and bruised into a pulpy mass; one or both of the optic nerves may be cut across by the passage of a ball. Wounds of the eye and its appendages demand some serious consideration from the military surgeon, not only owing to its great importance, as an optical instrument of the most perfect construction, wounds of it are often the immediate cause of death. It is also true that in the great majority of cases seen by the military surgeon, there is little opportunity for the display of ophthalmic surgery in the preservation of vision, yet it seemed desirable and proper for us to follow so high an authority as the great Larry as to point out the nature and

* On Wounds and Injuries of the Eye, by Wm. White Cooper, London, 1859.

results of the principle lesions which have been met with.

During the war in India by the English, a private of the 18th Regiment was struck in the right eye by a ball, which was cut out between the spine and the posterior edge of the right scapula; he died in the hospital at Umballa some weeks after his arrival there. It was ascertained that the ball had entered the lower part of the right eye, passing through the floor of the orbit, then ploughed along the base of the skull, carrying away the styloid process until abreast of the foramen magnum, when it quitted the bone and passed down the neck into the back.*

M. Menière, in his account of the Hotel Dieu, at Paris, during "the three days," tells us of a ball which entered at the inner angle of the left eye, passed downwards and backwards, and to the right side, under the base of the cranium, and was cut out from from above the right shoulder. The patient recovered rapidly without a bad symptom. Sometimes the course of the ball cannot be ascertained. A French soldier was wounded at Waterloo. The ball entered the right eye; the left, though not in the slightest degree injured in appearance, was completely blind. The patient was quite convinced that the ball had entered his brain, but its seat never could be discovered by Dr. Hennen. He returned to France convalescent.

Occasionally the eye is torn from the socket, the surrounding parts being little injured.

Dr. F. Isenschnied has recorded† a case of a soldier who was struck by a ball on the right eye, which was driven almost entirely out of the orbit, the cornea and sclerotica being ruptured, and the vitreous humour lost; nevertheless, neither the lids nor the orbit were implicated in the wound.

A good example of the terrible effects resulting from a gun-shot wound is related by Dr. Fenin, the Chief Surgeon of the Military Hospital at Cambrai:‡

A soldier in Algeria was shot in the face; the bullet passing from left to right, destroyed the cornea and the upper portion of the sclerotic of the left eye, the bones of the nose, and lodged in the external and posterior angle of the right orbit. On the following day he was admitted into the Hospital at Blidah.

The right eye thrust outwards was enormously swollen, cold to the touch, and dull in color; the eyelids, equally swollen, were of a violet hue; there was violent pain in the head, and febrile disturbance.

Dr. Fenin found a tendency to gangrene, and decided on immediate extirpation of the eye, which he executed with facility. On passing the finger into the orbit, the ball was discovered flattened and misshapen, considerable difficulty was experienced in extracting it. The patient made a good recovery, though of course totally blind.

"The battle of Waterloo gave rise to numerous examples of lamentable injuries to the eyes produced by musket balls. In cases where the balls had passed near the eye, the vision was destroyed, in some without any apparent injury of the eyeball, and in others with the occurrence of every degree of inflammation. In a case where the ball passed behind the eyes, from temple to temple; one eye was destroyed by inflammation, and the other affected with amaurosis, but without inflammation. In a third, where the bullet entered the face on the upper and left side of the nose, and passed out anterior to the right ear, the patient was affected with amaurosis of the right eye. The left eye was similarly affected in a case where the ball had entered the right side of the nose, and had come out before the left ear. From eight to ten instances were seen in which musket balls passed through behind the eye from temple to temple. In one soldier the ball had passed through and behind the eyes, and he was affected at the end of some weeks with painful spasms in the face." *

A case is mentioned by Dr. Macleod,† showing how little injury and inconvenience may be caused by the immediate vicinity of a bullet to the eye. A soldier was struck at the battle of the Alma by a round ball, which entered close to and immediately below the inner canthus of the eye. The wound healed, and the patient had almost forgotten the circumstance, when after suffering slightly from dryness in one nostril some months afterwards, the musket ball fell from his nose, to his great alarm and astonishment. During the retreat towards Corunna, a soldier of the 36th regiment, who was left to cook his comrades' dinner whilst they were skirmishing with the enemy, was seen to suddenly fall backwards, and Dr. Burton, who chanced at the moment to be near, ran to him,

* Edinburgh Medical Journal, No. xi.
† Ann d'Oculistique, t. xxx, p. 107.
‡ Ann d'Oculistique, t. xx, p. 105.

* Cooper, p. 86.
† Surgery of the Crimean War, p 223.

and found that he had received a wound under the left eye, as if made with a rough cutting instrument; very considerable echymosis took place, which was got rid of by pressure. Dr. Burton extracted from the socket a musket ball, flattened so much as to resemble a piece of money, from its having first struck against the wall in front of the man. The eye did not suffer in the least, although the soldier underwent a very distressing march that night.

At the siege of Badajoz, a soldier of the 52d was struck by a bullet, which passed in at the inner canthus of the eye, fracturing the bone; blindness was the instant consequence, though the globe of the eye was not destroyed.

In Dr. McCrae's "Medical Report of the Campaign in the Punjaub, 1848–49," "it is stated that a European was struck by a musket ball, which entered at the side of the nose, passed into the orbit, and lodged just behind the eye; vision was lost, but the eye was unaltered in appearance. The man never felt inconvenience from the ball.

The injuries to the eye during the Crimean war were less numerous than might have been expected, the following interesting cases and observations were reported.* In one case a comrade's double tooth was found imbedded in a soldier's eye; in another, a portion of a man's skull was removed from between the eyelids; but generally it was from sand or small gravel stones struck up by shot or propelled by shell explosions, that injuries to this organ occurred. The removal of foreign bodies in this situation is imperatively called for not only to prevent or moderate inflammatory action in the injured organ, but in cases where only one eye is wounded, to prevent the extension of inflammation to the opposite eye by sympathy, and thus prevent the loss of a soldier to the service. It will be seen by the return, that twenty-four out of forty-one cases of injury to one eye, returned to duty without leaving the Crimea, only fifteen of this series having been sent away for further treatment, and the majority of these subsequently returned to duty at home, or from Scutari.

"In most of the instances before us, the vision of the injured eye was entirely lost, and complete collapse of the eyeball happened. In a few instances, however, small particles of stone were removed from the cornea without having penetrated into the interior of the organ. In one such case which occurred in the 77th regiment, the injury was followed by traumatic cataract of the wounded eye; but these fragments of stone sometimes penetrated into the interior of the eye; where visible, the proper practice would undoubtedly appear to be to remove them by incision, but no case is recorded where such was effected and vision retained.

In one instance, a man of the 88th regiment was wounded by a musket ball, which entered at the inner angle of the left eye, and made its exit close to the lobule of the right ear, passing behind the nasal bones. Neither eye appeared to have been organically injured, yet the vision of both was irreparably destroyed. On examination, the pupils of both were found to be much dilated, and they did not act to the stimulus of light. No appreciable inflammation of the eyeballs followed, nor could any other change in the shape or appearance of the several structures composing them be detected, but the eyes became at once and remained completely amaurotic, the man asserting that he was even unable to distinguish between bright light and total darkness. The wound gave little trouble, and he was invalided to England well, but totally blind, about a month after its receipt, and discharged from the service in this condition. In this case we are driven to the supposition that the concussion produced by the ball had injured the optic nerves." This case should have been submitted to a careful examination on his return to England by the ophthalmoscope, and no doubt would then have remained, as to the result of the injury. Might it not have been a detachment of the retina?

The following cases are reported as having occurred in the Naval Brigade: George Ellis, aged 22, of the "Queen," had been struck apparently by a piece of stone broken from a parapet of the battery, below the left eye; the anterior wall of the superior maxillary bone was fractured, and the antrum opened.

Another piece appears to have struck the cornea and laid it open, giving exit to the contents of the eyeball. His face and eyelids were covered with small wounds caused by gravel striking forcibly against them. A probe could be passed deep into the wound under the eye, but it did not detect any foreign body. The wounds were cleaned and dressed with lint. This man recovered with the loss of the left eye. On the 24th of August, a seaman was struck by a musket ball below the left eye;

* Medical and Surgical History of the British Army which served in Turkey and the Crimea, during the war against Russia in the years 1854, '55, '56.

there was an elongated wound on the lower eyelid, and the eye itself was hidden by the swelling; the ball had lodged, but its position was uncertain. On the 28th, a hard, imperfectly circumscribed spot was discovered anterior to the ear, and opened; when the supposed foreign body was discovered to be part of the malar bone, which was loose in front, but connected posteriorly. The patient was sent to Cossack Bay, where the ball was extracted from the antrum, but the sight of the eye was lost.

"No case is recorded of a musket ball or other foreign body, lodged behind the eyeball, but enormous swelling, with inflammation of the eye and lids, sometimes followed the lesions already mentioned, requiring active treatment by incision, bleeding, and free leeching for its control; but in no instance was the entire removal of the eyeball called for. One case occurred where both eyes were irrevocably destroyed by the gravel thrown up by a shell-explosion, complicated with extensive bruising and laceration of the face; one testis had been cut away entirely, and more than half of the other, with a large portion of the integument of the scrotum, by a fragment of shell, and a severe laceration of the forepart of both thighs existed. Both eyes had been penetrated and were collapsed; no bleeding of any consequence took place from the divided end of the cord; the parts were simply cleansed and lightly dressed, and notwithstanding the severe nature of the general injuries, he was invalided to England at the expiration of two months, well but quite blind.

"Not less than four cases of loss of both eyes took place from explosions of magazines; these are returned among miscellaneous wounds and injuries, but two of them were cases identical with those last mentioned, where the coats of the organ had been perforated by fragments of foreign bodies driven against them, and vision entirely lost, the eyeball collapsing; but in one instance, the eyes seemed to have been disorganized by the direct force of the concussion conveyed by the medium of the air. In this case the aqueous humor would appear to have been forced between the layers of the cornea, as though no rupture of the eye existed, and the eyeball was full and retained its natural rotundity, a complete blueish white opacity of the whole of this membrane was found to have taken place within a few hours of the receipt of the injury. In this case the amount of inflammatory action set up was very slight, but vision was completely and permanently destroyed.

"In wounds of the eyelids and other appendages of the eye, considerable care and nicety of adjustment were occasionally called for, as every practical surgeon may well understand, and in wounds of the eyelids the use of sutures was more urgently called for to prevent subsequent deformity than in almost any other part of the body."

	Total treated.	Died.	Discharged to duty.	Invalided.
Penetrating wounds with lesion of				
One eye..	42	3	24	15
Both eyes.....	2	...	...	2

One of the deaths was caused by tetanus, and two by inflammation of the membranes of the brain supervening, where one eye had been destroyed. As cases of tetanus, from injury of the eye are rare, we will give the details of the case.

CASE OF TETANUS.

Private William Harding, 1st Battalion, Rifle Brigade, was admitted into the Regimental Hospital, on the 5th of September, with a severe contusion of the face, and very considerable swelling on the left side of the head.

The injury had been inflicted by the explosion of a shell, which drove a quantity of stones and gravel into his face; much of this was removed. The eyelid of the left eye was found to have been divided, and the eye destroyed. He complained of very great pain in the face and eye, but there were no remarkable constitutional symptoms. On the 7th of September, in syringing out the orbit, a hard substance was felt, and with some difficulty a piece of stone, the size of a large walnut, but of angular shape, was extracted, and much gravel, in small fragments, was afterwards washed out of the orbit. This relieved him much, and he was very easy till the ninth, when he complained of twitching about the month, and, on putting out his tongue, it was violently and involuntarily bitten by spasmodic contraction of the temporal and masseter muscles. The sterno-cleido-mastoid muscle was also much affected with spasms. These were increased or brought on by any attempt to protrude the tongue or to swallow.

Treatment. — The spine was blistered and

sprinkled with morphia, calomel frequently given in small doses, and chloroform exhibited; but the tetanic symptoms continued and became worse, and he died in great pain on the 11th, having remained perfectly sensible the whole time. On examination after death, it was found that the bony orbit was extensively fractured, including the orbital plates of the frontal, superior maxillary, and æthmoid bones. The sclerotic coat of the eye was torn open, and much gravel imbedded in its interior, and some fragments had been forced into the substance of the optic nerve.

*Treatment.**—"When a ball lodges behind the eye, it usually causes protrusion, inflammation, and suppuration of that organ- If it be not discovered by the usual means, its lodgment may be suspected from the gradual protrusion and inflammation of the eye itself. If it be discovered, it should be removed, together with the eye, if such proceeding be necessary for its exposure. If suppuration has commenced in the eye, a deep incision into that organ will arrest, if not prevent, the horrible sufferings about to take place, and allow of the removal of the offending cause. If the eye remain in a state of chronic disease and suffering, a similar incision will give the desired relief. If the chronic state of irritation affect the other eye, the incision and sinking of the ball of the one first affected or injured is urgently demanded and should not be delayed. I have several times seen both eyes destroyed and sunk by one ball, with little other inconvenience to the patient; one eye sunk, the other amaurotic, and both even amaurotic, almost without a sign of injury, by balls which had passed from side to side through both orbits, but behind the eyes. When the eye becomes amaurotic from a lesion of the first branch of the fifth pair of nerves, the pupil does not become dilated; the iris retains its usual action, although the retina may be insensible and vision destroyed.

This was well shown in the case of the late Major-General Sir A. Leith, who was wounded by a sword in the forehead, this nerve being divided."

Larrey, in speaking of the solutions of continuity, to which the auxillary parts of the eye may become subject, makes the following observations on those which destroy the integrity of the *eye-brows*. "When the latter have been occasioned by pointed or cutting instruments, they may be accompanied by lesion of some of the branches of the trochlearis nerve, which are furnished by the ophthalmic of Willis."

"This circumstance may give rise to pretty serious nervous symptoms; suspend the functions of vision for a longer or shorter time, or change them in proportion to the extent of the injury. When this is the case, the injured nerves should be clearly divided, and the wound itself be converted, as far as may be expedient, into a simple solution of continuity. The nervous symptom will then instantly cease, and vision, which may have been suspended or weakened, will be restored with equal dispatch."

The following example is given by him under the article *Tetanus*:

"Upon the occasion of a charge of cavalry, M. Markeski, a lieutenant of a regiment of light horse, received, while in Austria, a thrust with a lance on the right side of the forehead. The point of this weapon had entered obliquely from below, upwards and inwards, under the pericranium, so as to produce a deep fissure in the substance of the frontal bone. One of the branches of the frontal nerve had been grazed (*eraillé*) by the cutting edge of the lance. In the night of the ninth until the tenth, tetanus was ushered in by convulsive motions in the eye-lids of the corresponding eye and by loss of sight in that organ. There was also some slight aberration of the mind. Emollients applied to the seat of the injury, and the exhibition of diaphoretic and opiated draughts, produced no effect whatever; the complaint went on increasing, and there was no doubt, that before the expiration of twenty-four hours, it would have arrived at the highest stage.

"I sounded the wound and readily discovered its whole course; the passage of the probe causing the patient the most acute pain.

"These motives determined me to divide, with a bistoury the entire substance of the corrugator supercilii muscle, and the injured nerve and blood vessel distributed to it, which was accomplished by a single incision from below upwards.

This officer experienced immediate relief, and in less than twenty-four hours all the tetanic symptoms were dispersed, and vision was completely restored."

He goes on to observe that "If however, some branch of the supra-orbital arteries has been divided, it will be best, after separating all the nervous filaments from them, immediately to apply a ligature, because mere pressure is often insufficient to stop the hemorrhage.

*Guthrie's Commentaries on the Surgery of the War, p. 523.

But, in no instance whatever, should the eyebrows be shaved, inasmuch as these hairy productions, with respect to their growth, remain stationary until old age, and that consequently months and years will be required ere nature can entirely reproduce the deficiency. If the division of the eyebrows is deep and extensive, it will be useful and almost indispensable to have recourse to a few stitches of the interrupted suture, so to preserve the precise consolidation of these parts, and the original relation of the hair which grows upon them.

The *eyelids* may be divided or lacerated, singly or both at once, in their whole diameter, and in different directions, either by side arms or by projectiles of greater or lesser size. In every such case, immediate reunion is the first indication, and if the solution of continuity be regular and uniform, it may be accomplished without any further preparatory measure.

Where, however, their edges should appear to have been abraded, unequal, or notched, they should previously be cut smooth with a pair of curvéd scissors, being converted thus into simple wounds, an interrupted suture will keep them in exact apposition, and restore the eyelids to their primitive or normal conformation. Any loss of substance which may have occurred in their thickness, especially when the wounds are of a recent date, should be at once unhesitatingly supplied by a reunion of parts, for the inconveniences which are liable to result from retraction of these loose shreds suffer no comparison with those which their chafing might possibly produce."

No apprehension need be entertained on account of the passage of the needle through the tarsal cartilages, which, like all other tissues of the same genus, are not susceptible of inflammation; but care should be taken, when the suture is employed, to embrace within it a larger portion of the parts exterior to the globe of the eye, than of their inside surface, so as to prevent the retroversion of the eyelid; but, above all, the eye-lashes and the margin of these membranous coverings should be fixed in their precise situation. Care also should be taken when the solution of continuity is in the vicinity of the puncta lachrymalia, that the lachrymal ducts which arise there are not included in the suture. This dressing should next be supported by immobility of the parts, by an appropriate bandage and rest. It will be proper to keep the internal surface of the injured eye-lids moist, with a few drops of the oil of sweet almonds, in order to prevent the formation of adhesions to the corresponding point of the ocular conjunctiva. We are possessed of several examples of various injuries of these parts which, by the measure above described, have been treated with unhoped for success."*

Exsection of the Hip-joint.

By John Swinburne, M. D.,
Of Albany, N. Y.

[Read at the meeting of the Albany County Medical Society.]

December 26, 1860, was called to see J. O'C., æt. ten, from whom I learned the following history of his disease.

In September 1860, he received a kick, and blow with a stick on the hip, which gave him much pain—following this, pain was referred to the knee, and this increased in intensity for three months, as did also the lameness; the pain was especially severe at night, preventing sleep and destroying the appetite, followed by gradual emaciation.

December 26, 1860, I found him in bed, suffering great pain; much emaciation, loss of appetite, anæmic, night sweats, great tenderness over the hip, thigh, and knee; hip and thigh swollen; pain mostly confined to the knee, and particularly on any attempt being made to move the limb. He at this time had been confined to the bed for one month.

Full extension and separation of the diseased surfaces relieved the pain; this extension was perpetuated by the perineal belt, fastened to the head of the bed, and by means of adhesive plaster and rope to the foot of the bed effected extension, and at the same time warm lotions were applied to the hip, hoping by this means to prevent the inflammation terminating in suppuration. Notwithstanding this, it continued to grow worse; pain, swelling, tenderness, heat, etc., indicating the formation of pus; which symptoms continued increasing. The extension was then discontinued for about six weeks, when there could be no mistake as to the formation of pus in the joint. On making a free incision into this swelling, it discharged a large quantity of pus and broken down fibrin.

On my next visit, to my astonishment I found the head of the bone dislocated backwards and upwards on the dorsum illei; the knee and thigh carried over the well thigh, and in this

*Clinique Chirurgicale, Paris 1829-30.

position remained fixed. The muscles were contracted to such a degree, that the dislocated bone was retained in its *mal position* and could not be reduced, and, on careful examination of the bone, I found it soft and spongy, so that the probe passed easily through its texture.

April 2d, one month after the evacuation of the pus, (in the presence of Drs. Willard, Baily, Young, Moore, Birdsell, and O'Leary,) I, after plying chloroform, proceeded to exsect the hip-joint. The dissection was easily effected, with little loss of blood, and comparatively no shock, in fact he was easier and better after the dissection than before.

The dissection consisted in a T shaped incision, the longest cut was in the axis of the head and neck, and about four inches in length, while the shorter one was about two and a half inches in length; through this opening the bone was thrust out and sawed off through the neck; finding, however, that the remaining portion of the neck was still diseased, I made a second section just above the inter-trocanteric space, and still keeping clear of the cartilage, which connects the shaft with the epyphisis, so as not to destroy the growth of the shaft. I then gouged out the dead bone at the bottom of acetabulum, cleaned out all the loose fibrinous deposits (not less than one and a half ounces.) The limb was now drawn down to its normal position, and retained there by means of weights and pulleys; at the same time elevating the foot of the bed that the body might impinge against it, as the counter-extending point. This extension was continued for five months, during which time his general health continued to improve under the influence of anodynes—quinine and iron—generous diet, and all the stimulants his stomach could bear. No unpleasant symptoms followed the operation, and in fact he was better the next day than he had been for weeks previous, and though he still suffered much pain, his condition was improved materially. The wound nearly healed at the expiration of three months; occasionally, a debris of bone would discharge, which kept up a small opening in the lower portion of the cut. At the expiration of four and a half months, a small abscess formed and opened near the spine of the sacrum; this discharged a small debris of bone. It, however, soon healed, and at the expiration of five months the pain had subsided almost entirely; his health and flesh returning with the limb in good position, and only half an inch shorter than the sound one—*both trocanters* equally prominent.

I applied Sayre's hip-joint extension apparatus and allowed him to go about on crutches. Now (eight months) his health is perfect; no pain at all; appetite enormous; increasing in flesh; very slight discharge from the wound, and, while standing, there is no perceptible difference in the appearance of the two limbs. In fact he can be considered well.

This case deserves some special comments:

1. The suddenness and severity of the inflammatory attack from the time of the injury.

2. The rapid formation of pus.

3. The suddenness of the dislocation of the bone after the discharge of the pus, and the great contraction of the muscles of the thigh, and particularly the abductors which carried the diseased limb over the sound thigh, and the pertinacity with which they remained contracted in that position.

4. The early, honey-comb softness of the bone, as well as the entire absence of absorption or external change of its bony tissue, and the complete preservation of the normal contour of the head and neck of the bone.

5. While the entire destruction of the capsular ligament, ligamentum teres, cartilages of the acetabulum and head of the femur; also, the excessive formation of pus, attest the severity of the inflammatory attack; the emaciated form, the exsanguined and pinched expression of the features, the excessive pus drain, and the horrible distorting, nocturnal pains, point to a speedy dissolution, unless relieved by surgical interference.

6. The complete dislocation of the head of the bone, backward and upward, two inches from the acetabulum, and on the dorsum illii—*per contra*, the ease with which the operation was performed and the comparative relief from suffering.

7. The rapidity of the improvement as to pain, appetite, and comparative comfort, after the exsection.

8. The preservation of the natural contour of the limb and hip.

9. The facility with which the case was treated, without the wire breeches, which surgeons generally consider indispensible to success.

10. The nearly complete restoration of motion of the thigh on the pelvis, and which is daily improving. The restoration of *perfect motion* is (in my opinion) not problematical.

11. The advantage of the Sayre splint to complete the treatment, cannot be too highly prized, since it allows motion and out-door exercise, and at the same time keeps up the proper extension and counter-extension.

For the subsequent success of the treatment, I am much indebted to Dr. C. B. O'Leary, who visited and watched him attentively night and day.

While on this subject, I beg to say something more as to the result of exsections and of opening joints.

In April, 1861, Dr. James R. Wood politely showed me one of his cases of exsection of the hip-joint at Bellevue Hospital, which was progressing with every prospect of perfect success, and in answer to my interrogations as to his views of exsections, he laconically replied that "we must select our cases." I saw one which had been exsected by Dr. Guerdon Buck, at St. Luke's Hospital, this was also doing well and augured favorably for perfect success.

Dr. Sayre showed several perfect results (in private practice) and others in the progress of treatment—these bid fair to be perfect results. He also presented several diseased knee-joints in the different stages of treatment by free incisions. Also some cases where the joint had recovered its entire mobility. He also showed me the result of a case of disease of the ankle-joint, through which he had passed a seaton from side to side, and kept it in until full separation was effected, when the wound was allowed to heal by granulation. I found this girl skating in the *Palace Garden*, while no perceptible difference in gait or otherwise could be perceived.

In answer to my inquiries as to exsection of the different joints, he said that "the ball and socket joints are the most suitable for exsection, while the hinge-joints are best treated by free incisions and subsequent suppuration, granulation, &c."

In the American *Medical Times*, Vol. 3, p. 192, I find a statistical table of exsections from the recent work of Dr. Hayfelder on exsections, which might seem to contrast strongly with the views of Dr. Sayre.

	Deaths.	Cures.	Cures.
Exsection of hip 66 cases,	33	33	being 90.50 per cent.
" knee 179 "	54	125	2.30 "
ankle (foot) 22 "	3	19	6.33 "
elbow joint 288 "	33	220	6.66 "

While of partial exsections the results are so favorable as to encourage repetition.

	Deaths.	Cures.	Cures.
Partial exsection of the knee 36 cases	16	20	125 p.c.
" " foot 77 "	8	69	
Exsection astragalus, 67 "	9	58	
" os calcis, 81 "	1	83	

Taking these figures, they speak well for exsection of the large hinge-joints, such as the elbow, knee and ankle, while in the hip 50, are cured, in the knee 2.30, in the ankle 6.33, and in the elbow joint 6.66 are cured. This table is not in accordance with the above-mentioned idea of Dr. Sayre, though when Drs. Sayre and Cooper came to present a tabular view of the comparative success of exsection of hinge-joints on the one hand and the free incision into the same, (taking it in all points of view,) I am induced to believe that the free incision will still present many advantages over exsection.

1. In free incisions there is less shock to the system and less active reaction.

2. There is no loss of substance or shortening of the limb.

3. There is much less danger of permanent anchylosis.

4. It is much more within the range and province of all physicians, and hence if only equally advantageous to the patient, it is still better for the profession because within the province of all. Once establish *this* fact that the danger of opening joints is but trifling, and many bad cases would be cured by this method which would never have been exsected from fear of so formidable an operation, and from an insufficient knowledge on the part of the physician, or the want of proper means to defray the expenses of so tedious an operation and convalescence, and hence would remain and suffer on until death relieved the patient.

5. As to the comparative time to complete the cure in the two modes of operation I have no data.

In the way of chronic joint surgery, Dr. Sayre is doing wonders, and though I do not propose to go into a discussion as to the merits and demerits of his original claim as to the apparatus for the treatment of morbus coxarius in the first stage, I do emphatically say that the doctor deserves the *gratitude* of suffering humanity for bringing his apparatus prominently before the profession, by which, extension, motion, and exercise are combined. Thus keeping up and improving the health of the little sufferer. I have within six months applied this apparatus to two cases of morbus-coxarius in the first stage, and the result is satisfactory in the highest degree.

In the Philadelphia Medical and Surgical Reporter, Vol. 7, page 40, will be found an article, quoted from the San Francisco *Medical Press*, for July, in which Dr. E. S. Cooper lays down what he calls new surgical principles, and enumerates them from 1 to 7. In the main, I think the doctor correct, but while all this may be true of a diseased joint, I would make the pertinent inquiry:

1st. Were you, as surgeon, to find a healthy knee-joint opened for two, three, or four inches in length with a clean cutting instrument, would you allow it to heal by granulation? or would you rather close it by metalic sutures as carefully as possible with the object of obtaining union by the first intention?

2d. Were you called to treat a punctured wound of the same joint, would you close it, allow it to suppurate, or would you rather convert it into a full and free incision?

3d. In the operation for the removal of false cartilages from the joint, should your incision be large and free, and allow the same to heal by granulation? or should you strive to remove the cartilage by subcutaneous incision, and so heal the wound by the first intention.

There are some important considerations in reference to healthy, in contra-distinction to diseased joints, which require further consideration, and I candidly confess (with my limited experience) that I am unable to give a solution of them. I would therefore invite the profession to investigate carefully this important and intricate matter.

Case of Scirrhosity of the Pancreas, with Induration, Hypertrophy, and Ulceration of the Duodenum and Pyloric Extremity of the Stomach, with remarks,

By John S. Rohrer,
Of Philadelphia

The pancreas, as well as the duodenum and lower part of the stomach are much more frequently involved in scirrhous diseases, I conceive, than is generally supposed by medical men. In support of this view I need but mention the fact that the symptoms which serve to make out the diagnosis are exceedingly ambiguous, and are often confounded with chronic gastritis and other disorders of the adjoining viscera, thus rendering it extremely difficult to recognize the disease during life. It is obvious, therefore, that the interest of science, on this point, can be best advanced by tracing the symptoms considered obscure and often made to account for dissimilar action, in connection with the pathological lesions, to their true source or condition of the organs affected; and this can only be done by a careful investigation of the parts after death. I will give the *history* and *autopsy* of a case which may be considered a type or example of some eight or nine cases which have come under my notice in the course of my practice, exhibiting, however, a diversity of symptoms.

Mrs. D., wife of a laboring man, aged thirty-seven years, had been afflicted at intervals with spells of nausea and vomiting, which commenced about two years previous to her death, but the last six months the symptoms increased in intensity, and the vomiting became almost constant after taking food. About this period a pain seized her in the region of the epigastrium, and continued with more or less severity during the remainder of her life. Also, a lump made its appearance in the lower region of the stomach, which was not very tender to the touch, as considerable pressure could be borne on it by manipulation of the hand or fingers. This increased gradually in size until it became as large as a "goose-egg." A pulsation was felt through it as if given by the aorta beneath; solid food could not be retained. The patient's diet was pretty much confined to fluids, and even such were often ejected a few minutes after they were swallowed. Cold drinks and ice creams were longest retained. The patient gradually emaciated until she became reduced to a mere skeleton. In the latter stage of her complaint, that is to say, three or four weeks previous to her death, her skin became very yellow, assuming the color of a *lemon*. Her pulse was weak, and diminished in caliber. The matter ejected from the stomach was frequently quite black, but at times, in the early stage, it consisted of pure bile; the alvine discharges escaped notice, but there was alternate constipation and diarrhœa. Her appetite was variable, sometimes craving and attended with longings for different kinds of food, which was no sooner indulged in than ejected, until her system became exhausted, and she died, apparently for want of power of assimilation and nutrition.

Autopsy.—The body was quite yellow, all the fatty substance having disappeared; the eyes were sunk deep in their sockets, and the muscles absorbed or wasted to mere shreds, and on making an incision, no adipose substance could

be traced through them. On opening the cavity of the abdomen, a large body presented itself, which was found on examination to be the stomach and pancreas, the lower portion of the former being much indurated, and the pyloric extremity embraced by the latter, enlarged and in a *scirrhous* condition, forming a *hard tumor, entirely obliterating the pyloric orifice.* The pancreas throughout was altered in structure, presenting an irregular globular mass: the colon *constricted* and adherent to the duodenum and surrounding glandular portion of the pancreas. Also, the internal surface of the duodenal extremity of the stomach exhibited malignant ulceration. The liver was somewhat enlarged; the ductus communis partly closed, and the pancreatic duct entirely obliterated; all other parts, as far as examined, were in a normal condition.

The above is the only case of which I have a record, and is offered as having some points of interest in view of the fact that it is an example of a number of the same variety which came under my observation, and serves to illustrate the pathological lesions of all of them, as shown by post mortem examination, as well as by the physical signs during life. It may be proper further to state that similar cases have frequently been confounded with chronic gastritis, ulceration of the mucous membrane of the stomach, and induration and enlargement of the liver, etc., without any suspicion having been entertained of their *true nature.* The symptoms most frequently observed at the beginning are nausea, vomiting, with pain in the epigastric region, and other disorders of the stomach; but as the disease advances the pain of the acute form increases, and not till after considerable emaciation and frequent alvine evacuations will the deep-seated pulsating tumor make its appearance in the lower epigastrium, which will prove to be the enlarged and indurated pancreas, having sometimes a flattened surface; salivation, constipation, or diarrhœa follow in the train; but the most characteristic and reliable symptoms in this peculiar affection, in connection with those already enumerated, are the *deep jaundice* and great emaciation and anæmia which generally follow. It must, however, be borne in mind that the tumor or morbid enlargement already mentioned cannot always be felt in the early part of the malady, and is therefore frequently not observed before abdominal pulsation takes place, which is not often discernible in the beginning of the complaint; but when a deep-seated pulsating tumor is noticed, with a well-marked *bruit de soufflet* resembling an aneurism of the aorta, for which I have seen it mistaken, you may rely upon the accuracy of your diagnosis. This pulsation is caused by the action of the abdominal aorta beneath giving the impetus which is felt through the density of the tumor.

As the pancreas no doubt is the *original seat of the disease,* the surrounding organs becoming subsequently involved, it is probable that jaundice is occasioned by pressure, causing not only a constriction of the common *bile duct,* but often closing entirely its duodenal extremity. In conclusion, with the facts, of which I have given a brief summary, I will add that in nearly all cases which I have examined AFTER DEATH, in which a tumor could be felt in the lower epigastrium, and which were attended with frequent vomiting and the *yellow tinge* of the skin, the cardiac orifice was found narrowed, the duodenum, as well as the duodenal extremity of the stomach thickened, and the pyloric orifice nearly closed, or entirely obliterated; the pancreas hardened, enlarged, or disorganized and completely involved in scirrhous disease.

Case of Fracture of the Parietal Bone, with Injury to the Base of the Skull—Trephining, Temporary Improvement, and subsequent Death.

On the 31st of last August, Wm. R——, æt. 25 years, of good constitution, received a blow, from a stone, on the left side of the head, a short distance above and back of the ear. He was apparently but slightly stunned by the immediate effects of the blow, having eaten his supper, and afterwards walked about for some considerable time.

At noon on the succeeding day I took charge of the case, at which time the following symptoms were present: Complete insensibility; slow and feeble pulse; cool extremities; stertorous breathing; partial paralysis of the right side, almost entire of the right arm; dilatation of the pupils, greatest of the right; involuntary discharge of urine; bleeding from the left ear; and pointing of the uvula to the right side.

A careful examination of the head revealed a depression of the parietal bone, immediately under the point of injury, unaccompanied by any wound of the scalp, but by considerable tumefaction of the integuments.

Fearing the existence of fracture at the base of the cranium, I felt undecided what course to pursue in the treatment of the case, and therefore requested counsel. Accordingly, Drs. West, Alexander, and Tigart saw the case in consultation. We were united in the opinion that fracture existed at the base of the skull, but as affording the patient the only hope of recovery, and in justice to the young man charged with inflicting the injury, we concluded surgical interference with the fracture of the parietal bone was called for.

Early on the next morning, assisted by Drs. West, Estep, and Tigart, I operated. Several pieces of bone were removed, and a triangular portion which was depressed, but not broken off at the base, was raised to its proper position by the elevator.

There was a large collection of coagulated blood deposited between the dura mater and skull; this was carefully removed, and the flaps replaced loosely, giving room for the discharge to take place. The condition of the patient when operated upon, was much the same as already reported.

In an hour or two after the operation he became *perfectly rational*, and for more than *two weeks* remained comparatively *well*. The paralysis entirely passed off, and not the least difficulty was experienced in walking—his step was firm, and carriage erect; he ate heartily, and slept naturally, suffering but little pain in the head, except that caused by the wound of the scalp.

On the seventeenth day from the date of the injury, while eating his supper, a feeling of strangulation was suddenly experienced, which almost as suddenly disappeared, leaving him in his former condition. There was no change in the symptoms during the next twenty-four hours; at the end of this time the feeling of strangulation returned, followed in a few minutes by a severe spasm, accompanied by the discharge, at first of blood, afterwards of a thin watery fluid from the left ear. During all this time the patient was apparently *rational;* on several occasions, while suffering from a spasm, he encouraged his friends to be of good cheer, assuring them it would soon pass off.

In a few hours the spasms ceased to recur, leaving the patient suffering great pain in the head, *but still rational*. At times the discharge from the ear would cease, and recur from the opening in the skull. This state of things continued until his death, which occurred on the evening of the twenty-fourth day from the date of the accident. The next morning, (fourteen hours after death,) assisted by Drs. West, Estep, and Updegroff, I made an examination of the cranium. Lying on the dura mater, for several inches around the point of fracture, was an accumulation of dark, semi-purulent blood. The membrane was not ruptured. On opening the brain, no evidences of concussion existed on the side opposite the injury; in the left hemisphere, immediately under the point of fracture, the substance of the organ was injected, and red with blood. With the exception of these changes, the entire brain was comparatively healthy.

We could not discover any extension of the fracture to the base of the skull. There was, however, a fracture of the petrous portion of the temporal bone, commencing near its base, a short distance below the superior border, and extending downwards and inwards, across the anterior surface, almost to the anterior border, and from that point continuing inwards to within a little distance of the apex. The fracture crossed the meatus auditorius internus, and partially destroyed the delicate apparatus it contains, by suppuration.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

MEDICAL CLINIC.

Nov. 23, 1861.

Service of Dr. Gerhard.

HEMIPLEGIA—PARALYSIS.

This was the case of a marine in the United States service, who was attacked ten days ago while at dinner with a sudden rush of blood to the head, which nearly caused him to tumble over upon the floor. Since that time his right arm and right leg, also, have been paralyzed; he had severe pain in his head, for which he was seven times cupped and kept on low diet, but not purged, before he came in to the hospital. He has the paralytic intonation of voice, a little husky; his mouth is slightly drawn to the left, and his tongue turns slightly to the right as he puts it out; both knees are weak—the right, however, is the worst; but there is the *entire absence* of the prickly sensation, which is often characteristic of these paralytic affections; this symptom you will specially mark. His head is the only part in which he feels any sensation of pain or distress; he has a dull, heavy pain in the head; his eyes are injected, the left eye more than the right. Now, here is a lesion of the brain, of what part?

It is impossible to determine with exactness the precise seat of the lesion, except that it is seated in the left hemisphere of the brain, producing, of course, paralysis of the right side. There is no disturbance of the mental faculties in the case; I, therefore, conclude the summit of the brain is not the part affected. The lesion must be, then, in the lower portion of the brain, and the part most apt to be affected is the corpus striatum. Such lesions do not depend upon inflammation, but result from the effusion, sometimes of serum, sometimes of blood. From the symptoms which present themselves in this case, I infer an effusion of blood, small, not large. If a large fasciculus of the fibres of the brain is not torn by the extravasation, the paralysis will be slight; if many of them are ruptured, it will be more extensive and permanent.

Treatment.—He has been cupped sufficiently; his pulse is small, sixty in a minute, with some degree of resistance, which if increased will require bleeding. Blisters should be applied behind the ears. Purgatives are better in slight paralysis, and should be cautiously used. A sure purgative, and one which will produce watery discharges is an infusion of senna f℥ij, magnesiæ sulph. ℥ss, taken as often as may be necessary. Diet should be light, milk, soup. Cold may be applied to head. Prognosis favorable, though there is a tendency in the disease to return. The popular notion is that the third attack will kill the patient. It is not correct. There may be repeated attacks and the patient still get well. And where death is the result it is rarely instantaneous. It is only, perhaps, in those cases where the effusion is very large, that persons immediately die. There may be unconsciousness or a comatose condition, in such cases, where life may not be extinguished for hours.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC.

Nov. 16, 1861.

Service of Dr. S. D. Gross.

STRUMOUS OPHTHALMIA.

Miss M. C., from Armstrong county, Pa., 15 years of age; catamenia not yet established; healthy, robust in appearance; presents herself with an affection of the eyes of some time standing. On examining the eyes we find the conjunctiva congested, the vessels much larger than natural; everting the eyelids we find the same redness and congestion upon their inner surface; the lids are adherent in the morning, showing a supernatural secretion of the meibomian glands; there is great intolerance of light, so much so that she sometimes buries her head in a pillow, to avoid the light; this intolerance amounts almost to photophobia, and this is the characteristic feature of the affection; the parts are exceedingly vascular.

In the treatment of this affection, the first point is to look after the general health; a regular system of purgation should be adopted, and for this purpose give the following combination:

℞. Mass. pil. hyd., gr. v.
Ext. colocynth. co., gr. iij.
Pulv. aloes, gr. ij.
Antimonii et potass. tart., gr. $\frac{1}{12}$. M.
ft. pil. ij.

Take two every fourth night.

She may also take the saline and antimonial mixture, with sulphate of morphine, gr. $\frac{1}{16}$, quinine gr. jss, dissolved in water, by means of sulphuric acid, q. s., and tincture verat. virid. gtts. jii, four times in twenty-four hours.

The eye should be washed in an infusion of the pith of sassafras in water, five or six times a day. To produce contraction of the vessels of the conjunctiva, an ointment composed of:

℞. Ung. hyd. nit., gr. x.
Cerat. simp., gr. lx. M.

Apply twice a day to the edge of the lower lid, with a camel's hair pencil a portion the size of half a grain of wheat.

The eyes must be protected from the light by a green shade, and must be kept at rest; she must not read or sew; her exercise should be moderate; she should wash the whole body daily with tepid salt water, followed by dry friction; the surface should be well protected with flannel; diet should be light; no meat or pastry. With careful attention to these directions the prognosis is favorable.

VARICOSE ULCER.

A female, 29 years of age, feeble, anæmic; countenance pale and anxious; menstruation regular; has an ulcer upon her right inferior extremity, a short distance above the ankle, on the inner side; it is now of four weeks' standing; two years since she had a like ulcer upon her left extremity, which healed; it has been painful, but not now; the skin is bluish, from congestion and from enlargement of the saphena vein; there is little tumefaction; her appetite is poor; extremities cold; she has great pain in her head and ear, so severe at night as to prevent her from sleeping; has bled five days in succession from her mouth, nose, and ears, and has had discharge of pus from her ear; before pain comes on has some chill; no perspiration but one night.

The treatment in this case must be directed to the constitution, and not to the local affection entirely. Give her, in reference to the pain, which comes on regularly at night, quiniæ sulph., gr. x, twice in the twenty-four hours, say at 3 P. M. and at 6 A. M., till she has taken gr. xl. I prefer the large dose of this remedy to the small one, as it attains the object more speedily and more effectually. Whether this affection is malarial in its origin or not I am uncertain. Sometimes, in the progress of these cases, the pain becomes neuralgic in its character, and it may be necessary to give the following combination:

℞. Quinia sulph., gr. ij.
Ferri iodid., gr. ss.
Ext. nucis vom., gr. ss. M.

Take three times a day.

The ear should be syringed twice or three times

a day with soap and water, and afterwards with a mixture of:

℞. Chloride of zinc, ℥ss,
Water, ℥viij. M.

which will act as a detergent, deodorent, and stimulant. Diet should be nourishing; she may have milk punch.

PHILADELPHIA HOSPITAL.

November 19, 1861.

Service of Dr. J. L. Ludlow.

CHOREA SANCTI VITI.

This disease is one of early life. It is seldom you find it in a person above the age of puberty. The case I present before you to-day, therefore, is one you will rarely meet with, and more interesting on that account. This man does not know how old he is, his family record being lost. He is not far from fifty, however. He was first attacked with this affection about one year ago, in the night, after performing some labor in the dairy. He was entirely well until that time, and since that time has exhibited this condition of constant muscular agitation. He shrugs his shoulders, makes ludicrous grimaces; his features undergo various distortions; he stammers in his speech, or hesitates, as if his voice was arrested; his extremities are in constant motion; if he attempts to grasp an object, perhaps his hand will be thrown off in another direction, and made to execute a variety of gesticulations; he stands up, but it is impossible for him to stand still; his limbs are in continual motion, sometimes regular, sometimes irregular, oftener a mixture of both; neither can he sit still. These symptoms all clearly mark the diagnosis. As I have said this is a disease of early life. But few instances are on record of its occurrence in persons of adult age. It seldom attacks very young children. It is most frequent between the ages of six and fifteen, or puberty, and in females than males. It sometimes occurs without any apparent cause, but the irritation of dentition, worms, eating indigestible substances, are frequent exciting causes, as also uterine disease, suppression of the menses, depraved habits of life, especially masturbation, which frequently occurs among boys at school. Girls affected with it, at the approach of puberty, are almost always relieved of it upon the establishment of menstruation.

The pathology of the disease is entirely unsettled. Some regard it as a lesion of the brain and spinal marrow; others as an effusion into the meningeal cavity of the spinal marrow; others as a softening of the brain and its membranes, serum in the ventricles, etc.—all agreeing on only one point, that it is an affection of the nervous system. A German observer has noticed an enlargement and disease of the odontoid process of the second vertebra. In regard to the indications of treatment, you should always endeavor to ascertain the cause of the disease, and direct your remedies to its removal, and from whatever causes it may arise, your aim should be to apply the proper hygienic remedy to remove them. If your patient be anæmic, you must attend to the general health, give tonics, iron, but the treatment is, to a greater or less extent, empirical. Many remedies have been proposed, but they fail to accomplish the object. Iron, Zinc, and Arsenic have their advocates, and are often beneficial. One of the best and most effectual I have found is the *cimcifuga racemosa.* which I use in the form of the fluid extract. The great aim in all the treatment should be to sustain the general health if it be at fault, and to give vigor to the nervous system and equalize its action.

ICTERUS, JAUNDICE.

Margaret A , an elderly female, who has been in the house a long time, always in good health until about two weeks ago, when she began to exhibit the symptoms of severe jaundice. Her skin is suffused, of an orange color; she had some pain about her right side when first attacked, but now has no pain whatever. The edges of her tongue are yellow, and a "crust," as she terms it, forms over it; there is also the same tinge in the conjunctiva; bowels inclining to costiveness; liver very slightly enlarged; urine dark in color, skin harsh and dry, and there is general languor and depression of spirits. The characteristic symptom in the case, and the one which distinguishes the affection, is the intense color of the skin, which indicates that, from some cause, there is an obstruction of the gall duct or proper action of the liver.

In itself, jaundice is a symptom rather than a disease, a result rather than an original affection, and it may arise from any cause which will produce constriction or closure of the hepatic duct, and this may be occasioned by pressure of the gravid uterus, from enlarged glands in the fissure of the liver, from impacted fæces in the colon, and from gall stones, Two specimens of gall stones, causing obstruction of the gall duct, were presented. In both cases the stones were as large as a small walnut, and one the product of a recent *post mortem*, was shown, impacted in, distending and closing up the gall duct, rendering the passage of the bile impossible. As a result of this closure, the bile, unable to find exit into the duodenum, is reabsorbed, and the coloring passes into the circulation, and gives rise to the peculiar tinge of the skin, which indicates the disease; the fibrine of the blood is diminished, and the blood itself becomes poisoned, producing coma, delirium, and finally death.

In the treatment of jaundice, remedies must be directed to overcome the obstruction of the gall duct and restore the healthy action of the liver; for this purpose, leeching, cupping, warm bath, the use of mercurials, as blue mass, which should be carefully watched, may be employed. Too much caution cannot be observed in the use of mercury. The preparations of potash may be used, or nitro-muriatic acid, which I have found to be one of the most efficient remedies I have used in chronic cases. Local applications of iodine may also be made in the region of the liver with benefit. The diet should also be carefully regulated, fatty matters being avoided.

CONGESTION OF LUNGS.

This man, fifty years of age, a laborer, always a stout, healthy, able-bodied man, was brought to the Hospital on Monday last, laboring under great dyspnœa, and extreme bronchial respiration all over the lungs. He is a temperate man, except an occasional glass of lager. Was taken twelve days ago suddenly, in the street; recovered from this attack, and resumed his labor; was again attacked, and brought to the Hospital. He represents himself as always well, save a hard cold sometimes, and a pain in his right side a year ago. When he arrived here his difficulty of breathing was extreme, and he seemed almost moribund. Under these circumstances, he was bled by the house physician, and had warm fomentations applied, by which he was relieved. This was proper treatment. Had I seen him, however, on his first admission, I should have bled him till the blood changed from its dark color to a bright venous hue. It was a case of active congestion of the lungs, and free venesection is the best possible remedy that can be used, and this notwithstanding the coldness of the extremities and the moribund symptoms, and I should have expected to have seen all his symptoms improved by it. He has been cupped, and has had turpentine fomentations applied, warmth to the extremities, alkaline mixture, with syrup of ipecac, blue mass, and under this treatment his case assumes a favorable appearance.

FROM THE LONDON HOSPITALS.

The *Lancet* for Nov. 9 contains the following cases, the one from *Charing Cross*, the other from *Guy's* Hospital, which may be interesting to our readers:

THIRTY-EIGHT EXOSTOSES GROWING FROM THE EXTREMITIES OF A GIRL.

F. H——, aged fourteen, applied to Mr. Barwell, on the 29th of July last, for swellings in different parts of her body. Her mother died nine years ago of consumption; the father has suffered all his life till lately from rheumatism, and about thirty years ago had a bony tumor removed from one of the thighs by Sir B. Brodie. She is the youngest child; there have been many born, but all have died except one sister, who is now about twenty, and has a small bronchocele. F. H—— has not menstruated, is of lymphatic temperament, has always had good health, but now suffers from pain in the chest, (gastrodynia,) and has grown thin lately. She fell down when a few months old and hurt her arm. The surgeon called in seems to have said that she was so fat he could not tell whether a bone was broken; at all events, no fracture was detected. The left forearm is now very much deformed, being bent inwards a little below its middle at an angle of 35°. The ulna appears to have been broken, and the fragments now override; the radius is bent in a rather abrupt curve over to the ulnar side. At the point of flexion the two bones are very widely separated.

On examining one or two of the swellings which the girl showed, they were found to be exostoses, and so numerous as to render an examination into their actual number and position necessary. They are thirty-eight in number, vary from the size of a half-pea (and very likely there are smaller ones not detectable) to that of a hen's egg; the smallest being on the fingers, the largest on the thigh. They all occur on bones of the extremities, not one being found on any part of the head or trunk. With one exception, they all have their seat on long bones—the exception is the scapula, and the bony enlargement in that spot is more like a thickening than an exostosis.

The large number of these exostoses would decidedly denote some constitutional defect, some unhealthy diathesis, giving rise to such excessive bony growth; but neither the general appearance nor the symptoms present anything to confirm such an idea. Dr. Willshire examined the urine, and found in it nothing abnormal. The condition of the left arm gives some clue to the probable state of the osseous system in general. The radius being so much bent, shows that the bones were all probably abnormally soft at a not very distant period. She affirms that the arm is getting more crooked pretty rapidly, and therefore it would appear that this bone (probably the whole skeleton) is unusually soft; but what connection, if any, there may be between such state and the abnormal deposit of bony matter is not evident.

Mr. Barwell has had constructed a paraboloid spring, furnished with padded straps, to fasten on the arm, and with a saddle to prevent the instrument turning round. By this means he hopes, as the bone is still soft enough to yield to the deforming force, that it will not resist a power applied in the opposite direction. Iodine internally is the general treatment, and a different application is being made to each tumor, in order to find if any one produces any greater effect than another.

PECULIARLY FURRED CONDITION OF THE TONGUE IN A CASE OF DISEASE OF THE BLADDER.

J. W——, aged sixty-one, a shipwright, residing at Rotherhithe, was admitted on February 22d, 1860. Habits tolerably steady, and general health good; occasionally drank too much; suffered from gastric disturbance. Fourteen days ago had a fall on to his back; blister applied, and soon recovered. For twelve months has had difficulty of micturition and incontinence of urine. Catheters have been passed with relief to the local affection; but the general health has become weakened. For two months his appetite and strength have been failing, especially he has felt weakness in the right hand. It is six weeks since the catheter was last passed; since then he has frequent calls to pass urine (intervals of an hour and a half), with some difficulty in commencing micturition, and passing only a small quantity at a time.

On admission, body wasted; countenance presents nothing peculiar beyond the wrinkles of age; conjunctivæ slightly yellowish; arcus senilis in both

eyes. Tongue covered with fur, especially on centre of the dorsum; the fur is thick, white, or almost brownish, approaching to the condition of hair; the conical papillæ being greatly enlarged. On examination with the microscope, the fur presents a hair-like appearance, and on its surface are numerous specimens of the "oïdium albicans." He has no cough; chest and heart sounds healthy; arteries visible in wrists, contorted, not rigid; pulse 76; bowels regular; appetite bad; urine, specific gravity 1012, pale, clear, slightly acid, no sugar or albumen; right arm and hand much weaker than the left, also less sensible to pain, and slightly atrophied; pain in region of prostatic gland, which is greatly enlarged.

No special treatment was adopted in this case, and he left the hospital on the 29th February, after being one week under observation, with his tongue in about the same state as when he was admitted. It appeared as if it was with him a natural condition, not causing any inconvenience, nor indicating any special disorder.

EDITORIAL DEPARTMENT.

PERISCOPE.

Summary of Papers contained in the Transactions of the American Medical Association, Vol. 13th, 1860.

By O. C. Gibbs, M.D.
Of Frewsburg, N.Y.

(*Continued from page* 180.)

Following the paper just considered, is a *Report on the Influence of Alcoholic Drinks on the Development and Progress of Pulmonary Tuberculosis, by Prof. N. S. Davis, of Chicago.*

Dr. Davis' Observations extend over 210 cases, diligently observed by himself, and he comes to the conclusion that no form of alcoholic stimulants is "*capable of either preventing or retarding the development of tubercular phthisis.*" With due respect for Dr. Davis, we must say that his conclusions are not satisfactory from the premises. We have no confidence in a few isolated cases upon a subject so difficult of investigation as this, teaching anything reliable in a scientific point of view. The premises in this paper, as well as in the prize essay of Dr. Bell, can be made to teach the opposite view with even a greater show of fairness. Dr. Davis divides his cases into three classes. First, those who have used alcoholic stimulants nearly every day for some time; second, those who have used them only occasionally, as on festive occasions; and third, those who life-long have wholly abstained from their use. Of his 210 cases, to the first class belong 68; to the second, 31; to the third, 51. In the second class, as they drank only occasionally, once in a month or two, they were worthless as tests of the preventive power of alcohol, and, so far as that is concerned, should be classed with the temperate. The first class is also defective for proof, as it contains the drunken vagabond as well as the moderate drinker. But we let this pass. Now, because tubercular consumption has occurred in 68 cases, while the patients were in the habit of taking alcoholic stimulants, he argues they can have no preventive power. We do not see that this follows as a natural conclusion. Let us turn the argument. More than two-thirds of the 210—that is 142—developed tubercular phthisis, while virtually eschewing alcoholic stimulants; hence, according to the argument, temperance is twice as favorable to the development of consumption as intemperance. We do not give this as an expression of our belief, but to show the falsity of the argument.

He says further, "By a series of experiments commenced in 1849, and continued, at intervals, until the present time, I have fully satisfied myself that the presence of alcohol in the human system positively *diminishes* the great functions of respiration, capillary circulation, calorification, and metamorphosis of tissue." Now, if alcohol diminishes the respiration, it is because it diminishes the *necessity* of respiration. If the lungs are much diseased, then they are incapable of performing their normal amount of labor, and anything that will lessen the necessity of that normal amount of respiration may be regarded as remedial. Again, he says it diminishes the metamorphosis of tissue. Now, many suppose tubercles are the result of *excessive* metamorphosis of tissue—is the result of an express disintegration over excretion. If so, anything that will diminish metamorphosis acts remedially in consumption. He says alcohol diminishes capillary circulation. In health, we do not believe it—in our hands it is the best diaphoretic, as well as diuretic, we possess—thus increasing excretion, according to the view of Drs. Timms, Fountain, and many others, it must act remedially in consumption. Where prostration is excessive, from great weakness, etc., alcoholic stimulants, it is true, diminish the evacuations, and even in this event act remedially.

To a person in health, we cannot say we believe that the daily administration of alcoholic stimulants is preventive of consumption; but when that disease is present, the judicious use of this class of remedies we believe possesses a power to prolong life equal, if not superior, to any other.

The daily administration of calomel to a man in health, will not be found a preventive against disease, but such administration may be *curative* when disease is actually present.

Prof. Davis makes the following acknowledgment: "I have met, also, with a smaller class of patients, who would take these stimulants freely for any length of time, without either deranging the stomach or the brain, and with a decided amelioration of all the pulmonary symptoms, and an arrest of the emaciation. Some of these have actually increased in *embonpoint*, and in from three to six months were highly elated with the hope that they were recovering. But truth compels me to say that I have never seen a case in which this apparent improvement under the influence of alcoholic drinks was permanent."

Will the Professor tell us whether improvement in similar cases of consumption has, in his hands,

been permanent under any other treatment? Or whether, in like cases, he has seen most marked improvement in any cases in which alcohol formed no part of the treatment?

Dr. W. W. Gerhard, whose experience in this class of cases is great, and has extended over a period longer than is usually the privilege of most medical practitioners, regards alcoholic stimulants as the most powerful remedial agents at our disposal against consumption.

We have thus criticized the views of Prof. Davis, because he invites critical attention to this subject, and because we regard both his and Dr. Bell's arguments upon this subject as illogical and unsatisfactory.

To make statistics valuable upon this subject, they should cover more ground. For instance, in Dr. Davis' cases, 68 occurred among a class that were in the almost daily use of alcoholic liquors, and 51 among persons strictly temperate. Now, if he will tell us what proportion the temperate bore to the intemperate from which these cases came, we may calculate the influence of temperance and intemperance respectively upon the development of consumption. As many of his cases were seen in hospital practice, and as nearly three-fourths of the 210 were of foreign birth, we are inclined to think that the intemperate class bore to the temperate, from which the cases came, a greater proportion than 68 to 51. If one thousand persons strictly temperate could be observed for twenty years or more, and also another thousand, engaged in similar occupations, and living in a similar climate, of the same nationality, and of similar natural robustness of health, but in the daily use of alcoholic liquors—as, for instance, three moderate drinks a day—but never to intoxication, could be observed through the same period, the number of cases of tubercular phthisis, occurring in each thousand respectively, would be of some value in determining the preventive or favoring influence of the regular and moderate use of alcohol in the development of consumption. Any statistics, like those of Prof. Davis or Dr. Bell, that do not consider the numbers of the respective classes from which the statistics come, their nationality, vocation in life, and all the influences that affect health, are, to our mind, utterly worthless as proof of any point or fact in science.

The next paper is a *Report on the Education of Imbecile and Idiotic Children*, by H. P. Ayres, M.D., Fort Wayne, Indiana. This is a well written and able paper, containing about one hundred and forty pages; but as we propose to deal mostly with practical facts, of interest to the physician at the bedside of the sick, we pass it, referring our readers to the original paper.

Succeeding the paper just referred to, is a *Report on Inebriate Asylums*, by C. McDermont, M.D., of Dayton, Ohio. The author says: "We believe an asylum as necessary for the inebriate as for the lunatic. Every consideration in favor of the one may be urged with equal force in favor of the other." This is a very interesting paper, but for reasons above given we pass it without further comment.

Following this is a *Report of Standing Committee on Medical Education*, by D. Meredith Reese, M.D., of New York. As this paper is of more interest to professors and teachers than to practitioners at the bedside of the suffering patient, we shall pass it, referring those interested to the paper itself.

The next paper is a *Report of the Committee on Medical Literature*, by D. F. Wright, M.D., of Nashville, Tenn. The subject of American Medical Literature is one of interest. As publishers and physicians we have been too prone to trust to transatlantic authors for books, &c. Publishers could get the brain labor of foreign physicians free of cost, and hence no encouragement was held out to American authors. Foreign books could be sold at less prices than an American book, because the MS. cost the publisher nothing; and, hence, too often the product of American brains gathered dust, and were food for moths upon the shelves of the publisher. This is all wrong. American physicians should encourage American authors by buying and reading their works, and American publishers should bring to the light American MS., even, if need be, to the exclusion of foreign reprints. Where will the American physician find such an Anatomy as Leidy's? Such a Physiology as Dunglison's, Draper's, Dalton's, &c.? Such a Materia Medica as Dunglison's, Mitchell's, Wood's, and Stillé's? Such works on Practice as Dunglison's, Wood's, Drake's, and Dickson's? Such works upon Obstetrics as Dewees', Meigs', Miller's, and Bedford's? Such works upon Surgery as Smith's, Carnochan's, Gross', &c.? Such works upon Diseases of Children as Condie's, Meigs', &c.? Such works upon Diseases of Females as Meigs', Dewees', Bedford's, and Hodge's? Such works upon Fever as Morris', Bartlett's, Drake's, La Roche's, and Flint's? Such works upon the *Urinary Organs* as Gross' and Morland's? Such works upon the Diseases of the Chest as Green's, Swett's, Gross', Gerhard's, Lawson's, and Flint's? Such works upon Medical Jurisprudence as the Beck's, Wharton and Stillé's, and Elwell's? In fact, works upon almost every branch of medicine have been produced by American authors, that are unsurpassed in practical usefulness by any of transatlantic authorship. But how are American authors rewarded? Where one copy of Gross' Surgery has been sold, ten of Druitt's has found a purchaser; where one of Wood's Practice, perhaps ten of Watson's, and so on to the end of the chapter.

So with Medical Journals. No nation upon the face of the globe publish so many and so good medical journals as America, and perhaps none are so poorly supported. There is about *forty* regular medical journals published in this country, and yet it is an indisputable fact that not *five* of them pay expenses. Since this was written there has been several deaths among the journals, and it is presumable that the epidemic is not fully spent. There will be a few more deaths; the loyal States fare the best; secession does not seem to be favorable to medical journal literature. Full one-half of American physicians extend to them no encouragement, and many others patronize, in ignorant preference, foreign journals. If physicians would but arouse themselves to a zealous determination to acquaint themselves with all the improvements of the age, and all there is of medical progress, then American medical books and journals will find a demand, and

authors be encouraged to put forth their highest endeavors.

It seems to us that what is most to be desired at present is a Journal, or Year Book, that shall gather up all there is of practical value to be found in American journals, monographs, published Society Transactions, and medical books, and present the whole in a greatly condensed form, and at a trifling cost. The labor of preparing such a summary of American medical progress would be very great, and to do justice to the work a peculiar talent would be required; but upon him or them who can successfully accomplish such a work, the blessings of the profession will ultimately fall. That such a work will ultimately be produced we have no doubt, if the profession will extend to it that encouragement and substantial aid which it of right deserves.

Having occupied thus much space with our own reflections, we have no space to analyze Dr. Wright's paper. If our readers suppose that the science of medicine owes nothing to American physicians, let them answer who first discovered anæsthetics? who first reduced dislocations by manipulations—dispensing with pulleys and the pain which they produce? who first used adhesive straps in effecting counter extension? who first invented the silver suture? who first carried the sponge armed probang into the bronchia? who first extracted ovarian tumors? who first devised the means for effecting a union in ununited fractures? Many questions of a similar kind might be asked, the true answers to which would redound to the honor of American physicians and surgeons.

The last and concluding paper in the Transactions is a Report on *American Medical Necrology*, by Christopher C. Cox, M.D., of Maryland. This feature of the Transactions is worthy of all praise, and we hope it may be continued from year to year, so long as the Society sxists. It is but just that the *Transactions* of the *American Medical Association* should perpetuate the name and fame of the members of the Association, and of distinguished physicians throughout the country.

——o——

CATARACT OPERATIONS.

Dr. Rivaud-Landrau, of Lyons, publishes, in *L'Union Médicale* of the 1st inst., very valuable statistics respecting 2,317 cataract operations (extraction, couching, and tearing) performed by himself during twenty years. The author enters into many details which will prove extremely useful as a basis for ophthalmological conclusions. Of the main results, we may state that, out of the 2,317 operations by the three methods, 1,921 were completely successful; 141 partially so, and 255 were failures. Out of the latter, however, the operation was tried again, and proved successful in 19 cases. As to the method of operating, the author finds that, by comparing the successful operations with the failures, the latter give nine per cent. for extraction, and thirty-nine per cent. for couching. Dr. Rivaud has, therefore, almost given up couching, except in peculiar cases. Tearing failed only in five per cent. of the cases; but is only applicable in congenital or soft cataracts.—*Lancet.*

HEMIPLEGIA AND PHTHISIS.

This kind of paralysis has been now and then observed in cases of phthisis, tubercular deposit in the brain being then suspected. A very striking case of this kind has been published, by M. Colin, in the *Gazette Hebdomadaire* of the 30th ult. The subject was a young soldier, aged twenty-three, who, up to the month of March, 1861, had enjoyed apparent good health. He had now dyspnœa and cough, slight dullness on percussion, with some rough breathing, being observed on the left apex. Almost constant headache was complained of, and the patient was greatly excited during the severe fits of pain, screaming aloud while the paroxysm lasted. On March 24th, delirium supervened, and the headache was worse than ever. The next day vision became imperfect, and on the 26th facial paralysis set in on the right side. On the 28th, there was complete amaurosis, and on the 30th the paralysis extended to the whole of the right side of the body. Death occurred on April 1st, On a post-mortem examination being made, a vomica, which might have lodged a walnut, was found in the right apex. In the brain, a few granulations were observed on the internal origin of the fissure of Sylvius. In the inferior angle of the torcular Herophili, several tubercles were found, of a yellow color, varying in size from four lines to an inch in diameter. There were altogether six tubercles sunk in the pulp of the cerebellum, and a seventh placed on the surface of the cerebellar substance. The volume of the mass of tubercles was about a third of the size of one of the lobes of the cerebellum.

——o——

Health of the Army.—The Vermont regiments are the most sickly in the army, owing to the sudden and entire change of climate probably, they being sent directly to the seat of war upon the lower Potomac. The average of sickness for the last month was forty-eight to the regiment, the greatest being the Vermont, 144; then Rhode Island, 111; Michigan, 77; Wisconsin, 76; Maine, 69; Minnesota, 58; Pennsylvania, 52; Massachusetts, 50; Illinois, 44; New York, 27; New Jersey, 15.

Dr. L. Traver, of New Bedford, Mass., has been appointed Assistant Surgeon in the Navy, and ordered to report to Commodore Pendergrast, at Philadelphia, for duty on board the U. S. steamer Delaware.

On Wednesday last, Drs. J. Rodman Paul and Albert H. Smith; and E. Hoffer, were elected managers of Wills Hospital in this city.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, NOVEMBER 30, 1861.

THE HISTORY OF CLINICAL INSTRUCTION.

Clinical teaching is becoming every day a more important branch of medical instruction. It is now recognized as almost a necessity that the student shall spend a portion of his time at the clinic. Hence the connection of clinical lectures with all our Medical Colleges, and hence the opening of all our public and private hospitals for that purpose. The importance of such instruction cannot be overrated. But it is not our object to dwell at this time upon that feature of the subject, having already done so at some length in a previous number of this journal. The history of clinical instruction now demands our attention, and here we find the data furnished to our hands in the "*Address delivered at the opening of the new Clinical Room of the Philadelphia Hospital, by Dr. J. L. Ludlow,*" of this city. The first clinic of which history gives us any knowledge was established in 1643 in Holland. The most distinguished was that at Utrecht, under Straeton, and at Leyden, under Huernius. The latter was the first to examine closely the patient in the presence of his pupils and expatiate upon the nature of their diseases, which constitutes what is now termed clinical instruction. More than one hundred years after this, viz: in 1748, we find Dr. Rutherford giving a course of clinics in the Royal Infirmary of Edinburgh, Scotland, and five years after a clinical institution was established at Vienna by Boerhave, where lectures were delivered by Van Swieten, De Haen and Stoll. At the same period Dr. Cullen gave clinical lectures in the Royal Infirmary of Edinburgh, and was assisted by Drs. Wyeth and Monro, and afterwards Gregory and Home. The interest excited by these lectures in these countries, and the elevated tone of medical instruction which they produced, soon spread to the other schools of Europe. In Italy as early as 1715 a clinic was established by the Pope of Rome, mid all the splendor of the Church, of which Lancisci was inaugurated chief. In the University of Pavia in 1781, Tissot and Scarpa occupied clinical chairs. Clinics were also established in Spain, and students were compelled to see a town practice of two years before entering upon private duties. In Russia they have been continued upon a most vigorous and extensive scale since 1765. In France clinical instruction has surpassed that of any other country, though it was not until 1794 that clinics were attached directly to the faculties of medicine, and clinical professors provided. Desault occupied a chair of clinical surgery, and in 1795 Corvisart was professor of clinical medicine at La Charité. Among the pupils of Corvisart were Bayle, Lænnec and Baron Dupuytren, and many of the most eminent practitioners of succeeding years were educated under him. At the same time Fouqué founded clinical instruction in the old and time-honored University of Montpélier, and some time afterwards an obstetrical clinique was established at Strasburg. The *present system* of clinical lectures was established in England in 1822 by John Abernethey, though the privileges of the hospitals were extended to the pupils of medicine at a much earlier date.

Turning to our own country we find the *first recorded* dissection of the human body for medical purposes was made in New York by Drs. John Bard and Peter Middleton in 1750, and that the first *course* of medical lectures was delivered in Philadelphia by Drs. Shippen and Morgan in 1765, and also that the *first clinical lecture* given in America, was delivered at the Pennsylvania Hospital in this city on the 3d of December, 1760, by Dr. Thomas Bond, who was one of the physicians of that institution. In 1768, the example of Philadelphia was followed by New York in the establishment of a medical school, and in 1791, the completion of the New York Hospital gave that city the first opportunity for aiding the school of medicine by disseminating proper clinical instruction. Thus more than one hundred years have passed away since that system of instruction which has now become at once so popular and so essential, was first introduced into this country. From its small beginning, in this city, when the students were so few, that they could easily accompany the attending physician in his daily walks through the wards, it has increased so rapidly,

that it assumes almost gigantic proportions, and stands out before us to-day as one of the most efficient means of medical instruction. He who would be thoroughly qualified for the active duties of the profession must study diagnosis and the therapeutical application of remedies by the bedside and in the clinic. Theory is well in its place, and must not be regarded as unimportant, but it "vanishes into thin air" before the facts developed in the clinic. Books are useful as affording hints and suggestions for thought and reflection, as landmarks to indicate our progress, but worthless as guides, to be stricly followed. Didactic teaching in the medical school is important, as mapping out before the student, in brief, the theory and philosophy of medicine, but that which he sees with his own eyes, handles with his own hands in clinical instruction, will make the deepest and most lasting impression upon his memory, and will avail him most when the practical duties of the profession become a reality before him.

EDITORIAL NOTES AND COMMENTS.

Treatment of Prisoners at Moyamensing.—The United States Grand Jury, lately in session in this city, makes the following statement in relation to the treatment of prisoners now in custody here on a charge of piracy. They were specially induced to make their inquiries, and to publish this statement, by reports which have been circulated at the South, that these prisoners were maltreated or grossly neglected by the United States Government. There are now thirty-eight such prisoners, of whom thirty-six —being the officers and crew of the Petrel—remain untried. We found all these in good health, with the exception of one man, whose head had been injured before he was apprehended, and the captain of the privateer Petrel, who suffers from rheumatism, and gratefully acknowledges the attention, kindness, and skill of Dr. Henry Y. Smith, the medical attendant of the prison. We separately interrogated each prisoner, and received no complaint, either of food or treatment. R. M. Harvey, who acted as lieutenant of the Petrel, and was formerly acting lieutenant in the U. S. Navy, expressly returned his thanks for the kind attention of Mr. Perkins, which, he said, could not be surpassed. Harvey was the only person who preserved a supply of wearing apparel. The others are very deficient in clothing; several also complained of the want of shoes. We recommend that these wants be supplied, especially as the cold season has commenced. These prisoners complained that the prison regulations prevented the use of tobacco, which becomes a sort of necessity to seafaring men. The prohibition of tobacco, to untried prisoners, was occasioned, we believe, by the desire to keep the cells clean. Perhaps some modification of the rule might be permitted in the particular case of these men.

Death of St. Hilaire.—By the late steamers we have the intelligence of the death of Isadore Geoffroy St. Hilaire, which took place on the 10th of November. He was born in Paris on the 16th of December, 1805, and was the son of the famous naturalist, Geoffroy St. Hilaire whose discoveries with Cuvier attracted so much attention towards the close of the last century. The younger St. Hiliare inherited his father's abilities and at the age of nineteen was appointed assistant naturalist at the Jardin des Plantes. At the age of twenty-five he delivered lectures as substitute for his father. He shortly afterwards published the "General and Particular History of the anomalies of organization in man and animals." This was followed by the "General History of the Organic Kingdom." He also published a work on the "Domestication of Useful Animals," and "letters on alimentary substances, and particularly on the use of horse-flesh as food." This last work drew down on him a great deal of ridicule, the wits of Paris vieing with each other in their attacks on the new disease called *hippophagie*, or horse-eating.

Dr. Letheby on City Pumps.—This eminent London sanitarian, in his late report to the Medical Officers of Health, makes the followlowing statement touching the perilous character of the water furnished by many of the London pumps. We know not whether they will apply with any just force to the pumps of this or any other city of this country, but, judging from the appearance of the water we sometimes see ejected from the nozzles of some pumps in this city, and from the filthy surroundings, the inference we think to be a fair one, that a vast amount of organic matter is mingled in its composition, such as would not tend to promote the health of those who use it. The effects of these noxious elements, if such they be, may be latent

for a long period of time, but the prevalence of an epidemic would develope them most rapidly and fatally:

"Altogether there have been thirty-four of the city pumps examined, and in every case the water has been fouled with surface drainage. There is not one of these pumps that derives its supply from the deep strata of the London basin; and, excepting the pump in Glover's hall court, and that in Guildhall-buildings, none of them furnish water that is fit for domestic purposes. At the best of times some of them yield water which contains from 100 to 130 grains of saline and organic matter in the gallon, and all of them are excessively hard from the altered products of decomposition. The knowledge of the composition of the soil through which the water passes should warn us of danger that may at any moment arise from its use. It may be that it has often been drunk with impunity, and that it has rarely shown any immediate manifestation of its morbid action; but it cannot be that the products of corruption can be constantly admitted into the human body without danger of insidious mischief, and there is the still greater danger of the impurities of the soil passing unchanged into the water, and being a source of quick and certain injury. The water of the city wells is constantly changing—in fact, it is hardly the same from hour to hour; for the soil through which it passes is pierced in every direction with drains and sewers, and is charged with every species of corrupting refuse, which passes in variable proportions into the porous strata from which the water is pumped. This ought to tell us not only of the disgusting nature of the supply, but also of the dangers which lurk within it. Experience has shown that wells like these are liable at any moment to receive the leakings from a cesspool or a sewer, and thus to be the immediate cause of fatal disease."

"Nor are the percolations from the graveyards of a city less injurious; experience has demonstrated that this also is a prolific source of disease. Sir James M'Grigor relates that when the British army was in Spain, about 20,000 soldiers were buried in a rather small space of ground; this was done in the course of two or three months, and soon the troops who drank the water from the wells of the neighborhood, were attacked with dysentery and malignant fevers. The cause of the mischief was clearly traced to the hardly recognizable impurity of the water from the shallow wells. Here, however, in the churchyards of this city there are the remains of ten times such a buried army undergoing decay; and in the whole of this metropolis, in a space of not more than 218 acres of soil, there were buried not long since as many as 50,000 dead in the year. In a generation of thirty years this would give us 1,500,000 of decomposing bodies in the surface soil of London; and through these the water percolates, to find its way into the porous stratum which supplies the shallow wells. At best, the change of this corruption is but imperfect, and the presence of ammonia and saltpetre tells of the process of decay, and indicates the dangers which accompany it."

Correspondence.

BOSTON CORRESPONDENCE.

Meeting of Society for Medical Observation—Valvular Murmur, its frequency and treatment — Uterine Diseases — Treatment of Mammary Abscess.

Boston, November 20th, 1861.

To-morrow is Thanksgiving, and from every corner of the State the sound of preparation goes up. The weather is propitious, and the occasion bids fair to be one of unusual interest. The success of the Federal arms, and the apparent dawning of an era of better days, together with the fortunate capture of the Rebel Commissioners, will make the day a day of Thanksgiving indeed.

The condition of the general health in our city remains unchanged. Last week the total number of deaths was 62, of which 2 only were from typhoid fever. The continuance of the moderately cold weather, no doubt, tends to keep up this generally good sanitary condition, and without having had so much of the Indian summer as we usually experience, the weather, up to the present time, has not been cold enough to kill the vines and plants about the houses. I saw a running vine yesterday that was still blooming, and the leaves were as green and vigorous as in midsummer.

The Society for Medical Observation held its meeting last Monday evening. There was quite a full attendance, and much interest discussion. The frequency of valvular murmur was mentioned. From the testimony of the gentlemen present, the exceptions to its being found were almost rarer than its presence. One of them who holds the position of examining physician to a Life Insurance Company, remarked that he had been much surprised to find it so frequent. He had stated the fact in his report without giving any opinion with regard to it, and the company usually gave the party his insurance. Other cases were mentioned of persons, otherwise in ordinary health, who showed decided and well-marked murmurs in the region of the valves. From this the discussion turned to the question, how far this condition of things indicated danger? The fact of their presence was indisputable, as was also the

fact that there seemed to be no hindrance, by them, as to the ordinary duties of life being perfectly well performed. The summing up of the whole matter would appear to be, that although the presence of any lesion of the heart, or its appendages, was a source of anxiety and fear lest it might increase and seriously endanger life, still the fact that symptoms indicating these lesions had been so frequently noticed, and, nevertheless, the patients enjoying ordinary good health, should lead us never to give up hope in every case, or suffer us to be discouraged from the start. There is more value in the maxim, "while there is life there is hope," than many are willing to allow. Dr. Bowditch remarked, that in this class of cases, those marked by dyspnœa, greater or less, and œdema of the extremities he had found a combination of digitalis, colchicum seeds and soda, in the proportion of half grain of the digitalis to a grain each of the colchicum and soda, given three times a day, of very great service. The combination had been long in use and was entitled to great confidence. He had himself seen great and decided improvement from its use in a number of cases.

The everlasting question of uterine disease came up in connection with a case reported, where lactation produced excessive prolapse of the womb, as long as it was kept up. The patient was affected in this way in both of her confinements, but had nothing of the kind in the intervals of lactation, and immediately upon weaning her child the symptoms disappeared. The case is certainly peculiar, but whether it was post hoc propter hoc remains to be proved.

Incidentally, in connection with the last mentioned case, the treatment of mammary abscess came up. The value of the belladonna treatment was discussed. Dr. Buckingham remarked, that many years ago he saw a communication in the newspapers to the effect that belladonna applied on the breast would prevent any trouble with the milk. When he began the practice of medicine he pursued this plan, till the idea suggested itself to his mind whether the good effect of this treatment, after all, was not owing more to the fact that while it was followed out, the child did not nurse, than to the specific effect of the application. Acting upon this he had found the same results follow simple rest of the mammary organ, and his course now was to enjoin absolute freedom from all applications whatever. By thus doing, in the course of thirty-six or forty-eight hours the hardness will begin to abate, the pain and throbbing go away, and relief follow. When the nurse or the attendants would not carry out his views, he had no doubt that a thickly spread plaster of diachylon salve, applied to the breast, with just sufficient space in the centre to let the nipple through, by preventing anything else being done, would accomplish what he was after, and that that was the reason of the success reported by many of the members present, who had instanced cases during the evening. It was a very difficult matter, indeed, to induce the nurse to forego the use of the breast-pump, or rub the cakes out the breast, and while he had no doubt that in some patient's mammary abscess would form in spite of any treatment, just as they would occur in the breast at other times than during lactation, he had, no doubt, that generally they were the result of interference and injudicious meddling on the part of the attendants. In connection with this, it was remarked by a member, that in the treatment of cracked or sore nipples, from his own experience, he was convinced, that the let-alone course, giving the nipple as much rest as possible, by diminishing the degree of irritation, would bring about a healthy state of the part sooner, without any application of medicinal substances, than where they were exclusively relied on. The periods of nursing should be at the longest interval consistent with the comfort of the patient.

Trimount.

NEW YORK CORRESPONDENCE.

Ingenio stat sine morte decus:—Propertius.

Messrs. Editors:—At another meeting held by the Surgical Section of the New York Academy of Medicine, at the genial house of the Medical Cornucopia, Prof. James R. Wood, Dr. George K. Smith's paper, on the intra-capsular fractures, was discussed at length. Dr. Smith opened by remarking, in brief, the deficiency of evidence strong enough to prove that any of the specimens now in the possession of the learned surgeons who had written on the subject, were *intra*-capsular. Some were indefinitely described, others not macerated sufficiently to test the merits of the bond of union, etc., etc., etc.

Prof. March, of Albany, N. Y., paid an eloquent and graceful tribute to Dr. Smith's ingenuity, originality, industry, and, above all, *truthful* statements and wise suggestions. But this will in time appear in the pages of your medical journal. Dr. Smith may well be proud of what is justly his due. Dr. Wood stated that on the next meeting the subject would be still further discussed and developed.

An interesting exhibition was then made by Dr. Vedder, of the invention of a superior splint for hip-joint diseases, and some kinds of fractures. Its simplicity and cheapness will prove excellent aids in recommending it to the community in general.

After the judicious distribution of delicious "bi-valves," flavored cream hardened by low temperature, and a generous prescription of spirito-gentil tonics, the assembly dispersed, radiating in suggestive gratitude.

Last Wednesday evening, at the Academy

Proper, *i. e.* the University Building, the subject of anæsthesia was most ably treated by Prof. Fordyce Barker, of this city. Dr. Barker, whose experience is vast in all the modern improvements of obstetrical science, maintains that in certain emergencies this balm of consolation. in the shape of chloroform, cannot be too highly considered. The great power it exercises over the excited and delirious parturient female is only to be equalled by the calm result of its persuasive influence, The publication of this elaborate Treatise on so interesting a topic of vital import, will unfold the wisdom of employing such a remedial agent, and expose the ignorance and untutored inefficiency of antiquated practitioners, who refuse to use it at the bedside from the want of moral courage.

Dr. George T. Elliot made, also, some very pertinent remarks on the aid to be derived from ether, under certain circumstances, and when the experienced attendant should desire an effective agent for specific ends. The "paper" will be more thoroughly discussed at the next meeting.

The Sanitary Association is not idle. Many movements of no little consequence to this community, will bring to light the sad depravity of bar-room health wardens, and the unmitigated bribing of unlettered politicians, who know less of hygiene even than veracity. Progress will no longer tolerate the shameful usages of those who make a living out of others deaths. A proper system will be soon inaugurated.

Dr. R. S. Kissam is dangerously ill with pneumonia. Gourmet.

We cheerfully give place to the following letter from the President of the Essex N. J. District Medical Society. The letter sufficiently explains itself, and corrects the errors into which we were led by copying the statement made in such positive and apparently well-founded manner by the *Newark N. J. Mercury*. The second article in the *Mercury* escaped our observation, or it would have received prompt notice in our columns.

Orange, N. J., Nov. 21, 1861.

Messrs. Editors:—Your notice, in a recent No. of the Reporter, concerning the appointment of Mr. Craven as Brigade Surgeon, contains some erroneous statements and reflections upon the members of the profession in Newark, which need correction. As you derived your information from the "Newark Mercury," I regret that you did not notice an article in the same paper, published a day or two afterwards showing its falsity.

It is not true that "a letter was recently addressed by some of the physicians of Newark protesting against Mr. Craven's promotion." The letter addressed to the Surgeon-General was from the District Medical Society, and was unanimously approved by it.

It is not true that the Secretary of War sent a reply "commending him as having shown the highest degree of fitness for his position, and intimating that the opposition he has received proceeded entirely from feelings of jealousy." The Secretary of War, in his reply, stated that Mr. C. had passed the Board of Examiners, and had been recommended by them, and that the Department was not disposed to go behind their action.

The representations made to the Surgeon-General in the letter of the Medical Society *are well-founded.* Mr. Craven has no medical position whatever in Newark, has never taken a regular course of study *in* a Medical College or *out* of it, and has had no opportunities for investigation upon the cadaver.

He was not known as one claiming to practice medicine, to one-quarter of the members of the Society. The intimation, studiously circulated by himself and his friends, that the physicians of Newark are jealous of him is simply ridiculous.

The members of the Medical Society did not expect, by their action, to cause the removal of Mr. C. It was very evident to them, that if such a man received the appointment of Brigade-Surgeon, through the recommendation of a Board of Examiners, other considerations than those relating to competency, influenced it, and in the name of the profession, the Society protested, and will continue to protest against it. They regarded the appointment as degrading to the Army Medical Staff, composed as it mostly is of highly educated medical men. They were influenced solely by a proper regard for the honor of the profession, and for the poor wounded fellows, who might fall under his untaught and unpractised surgical hand, forboding to them evil, and only evil, and that continually.

Very respectfully, yours,

Stephen Wickes,
Pres. Essex Dist. Med. Society.

ARMY CORRESPONDENCE.

We copy from the *Medical Times and Gazette* the following interesting and instructive account of one of the "sanitary courses" which are held every six months in Zurich, Switzerland. The letter is dated

"*Berne, Oct.* 2, 1861.

"A number of medical men, sick attendants, and commissaries of ambulances were assembled in Zurich. The Staff-Surgeon first gave them instruction in the organization of foreign armies as well as of the Swiss forces, and the execution of the sanitary measures necessary for the efficiency of the service, the ambulances and hospitals, the general administration, the keeping of accounts, etc. They were then shown the whole material necessary for the

sanitary arrangements, and had to practise its application, unpacking and repacking. Especial attention was called to the transport of the sick and wounded by rail and other means of locomotion, regard being had to the experience made in the last wars. Manœuvres were then made under the command of the chief Staff-Surgeon of the Swiss army. A sham fight by the artillery and the infantry took place for forcing the passage of a river, and thirty soldiers were left wounded along the banks, ticketed with cards stating the kind and locality of the wounds. This was done in order to test the efficiency of those attendants whose special duty is the search for and the transport of the wounded.

"At a certain distance from the line of battle, on both wings of the force, the Surgeons set up in order to dress the wounded—all necessaries, straw, water, etc., being provided in abundance. A certain number of attendants and their helpers then advanced to the field of battle, searched for the wounded, made a rough preliminary dressing, and then transported them on suitable carriages to the Surgeons' tents, where the real dressing was done as simply as possible. Dressings with triangular towels were used for the wounds of the upper extremities, of the head and the feet, and for a large proportion of the wounds of the thigh. For fractures, different forms of single and double splints were employed, and the several methods of applying the gypsum bandage were practised—gypsum being always at hand in the Swiss ambulances. Capsules which are moulded for enclosing the whole extremity, and are only open at the top, will also be shortly introduced. This is of great importance, as they are superior to any other contrivance for the transport of the wounded. For limiting the use of the tourniquet as much as possible, the attendants and their helpers are practised in digital compression of the principal arteries, the experience of the Russian and English armies during the war in the Crimea having fully shown that this is far preferable to the use of the tourniquet. In the Italian campaign of 1859 therefore, scarcely any tourniquets were used; and even when amputations were made, digital compression was exclusively employed.

"At a suitable place, an ambulance was put up, and with the greatest rapidity a tent, which afforded room for about twenty wounded persons, was struck, and a transport wagon mounted. The attendants then unpacked the material, prepared beds in the tent, and a field-kitchen, according to the French system, in its neighborhood; in from fifteen to twenty minutes the flag waved from the tent as signal that all was ready for the reception of the wounded. The chief of the ambulance assigned their proper places to every Surgeon and attendant, etc. A wagon, drawn by a horse, was sent to fetch the wounded from the Surgeon's tents on the wings of the force; such wounded persons as were still able to walk followed the wagon on foot. They were then taken to the operating tables; the wounds were closely examined, the necessary operations made, and durable dressings put on—everything being done "*tuto cito et jucunde*." The commissary of the ambulance meanwhile distributed the material and made the necessary entries, while the wagon continually brought fresh supplies of wounded.

"In the meantime, another party had formed a suitable lazaret in a house and shed in a neighboring village, to which, in order to prevent a crowding of the ambulances, the wounded were, from time to time, transported, and there properly cared for. These proceedings were continued until all the wounded had been brought in, after which the ambulances were cleaned and repacked, and the tent raised.

"By these exercises, the sanitary field-service was practised in its whole extent, and the connection and the mutual action of all its parts clearly shown. In order to afford a better view of the whole and to avoid a loss of time, the several stations for rendering aid were situated much nearer to each other than would be the case in real warfare."

NEWS AND MISCELLANY.

Dr. Geo. B. Higginbotham, of Brooklyn, N. Y., has been appointed Assistant Surgeon of the U. S. Navy, and is now on duty on board the U. S. ship Courier, which forms one of the squadron at Port Royal, S. C.

Dr. S. Quick, of Phœnixville, Surgeon of the Forty-sixth Pennsylvania Regiment, has received the appointment of Brigade Surgeon, and is *quickly* to enter upon duty.

Dr. Lyman M. Tuttle, of Vernon, has been appointed Assistant Surgeon of the Sixth Vermont Regiment, in place of Dr. Carpenter, of Burlington, who has received the appointment of Surgeon in the Vermont Cavalry Regiment.

Chromidrosis Again.—It will be within the recollection of our readers, that a lady from Brest, in France, was convicted of deception by a committee to whom she had been referred. She pretended that a secretion of black pigment was constantly taking place on her upper lip; and had convinced her medical attendant at Brest that she should be looked upon as offering an example of a hitherto unknown pathological phenomenon. The lady travelled 500 miles to go to Paris, and had the mortification of being found out by the committee above alluded to, of which Dr. Guillot was the chairman. This extraordinary desire to deceive, merely for the purpose of attracting attention, caused some sensation in medical circles, and has induced Dr. Spring, of Liége, to communicate a case somewhat similar, and wherein

the deception was discovered by a very ingenious contrivance. The subject was a young lady, with whom the black color seemed to be secreted over the malar bone, and covered the whole space between that bone and the lower lid. When washed off, it would very rapidly be reproduced. All the medical men who had seen the girl were struck by the strangeness of the phenomenon; and the young lady was eventually presented to Dr. Spring (Professor at the Liége University) as a pathological wonder. Dr. Spring was, however, incredulous. Several very severe trials were made; but, though closely watched, the young patient always succeeded in coming off best. At last our sceptic hit upon the idea of applying over the part so frequently blackened by this strange secretion a thick layer of collodion. The patient was left for the night, after having been told that the collodion was intended to cure the malady. The next day the carbonaceous pigment was found *over* the collodion, and none *under* that compound. The deception was thus very clearly proved.—*Lancet.*

Answers to Correspondents.

Dr. J. W. B., Ill—The Reporter for one year, and Physician's Hand-Book of Practice for 1862, will be sent to your address for $3 60, paid previous to Jan. 1862. The Hand-Book contains in addition to the practical part, a Visiting List for some thirty patients, and sells at retail for $1 25 per copy. Subscribers to the Reporter get the book therefore for less than half what it will cost them if they buy it at the book stores. Or we will send you the Reporter and "Physician's Visiting List" for 25 patients, the retail price of which is 75 cents, for $3 40, paid withia the same time. These terms are exceedingly liberal, and we hope will induce you not only to subscribe for the Reporter yourself, but to commend it to others. tf.

Communications Received

District Columbia—Dr. H. Magruder, with encl. *Illinois*—Dr. W. J. Galt, with encl. *Indiana*—Dr. W. P. Wellborn. *Maryland.*—Dr. J. H. Taylor, with encl. *Massachusetts*—Dr. A. Cornish, Dr. Samuel Perham, Dr. Thos. Bayne Dr. Charles Cullis. *Michigan*—Dr. D. A. Post; Drs. A. H. Smith, E. D. Clark, each with encl.; Dr. B. Hesse, with encl. *New Jersey*—Dr. L. C. Cook, with encl.; Dr. Stephen Wickes; Dr. D. H. Meachem, with encl. *New York*—Dr. O. C. Gibbs, Dr. P. Bellinger, Dr. Jewett, with encl. Dr. I. F. Basora, Dr. J. Homberger, Dr. J. Foran, with enclosure; Dr. J. E. King, with enclosure; Dr. J. Swinburne, with enclosure; Dr. S. W. Francis (2). Drs. P. P. Staats, J. J. Dunlop, W. F Carter, G. H. Billings, James Lee, L. Weed. S. E. Whiting, T. C. Gilbert, S. Green, R. Hamilton, S. S. Strong. J. J. Flint, W. W. Parke, H. E. Dibble, J. Ferguson, M. S. Littlefield, A. Axtell, A. J. Long, J. W. Black, each with encl.; Dr. W. V. V. Rapalje. *Ohio*—Dr. P. Burman. *Pennsylvania*—Drs. P. R. Wagenseller, E. H. Horner, with encl.; Dr. W. C. Roney, with encl.; Dr. D. Gamble, with encl. *Vermont*—Dr. N. D. Ross, with encl.; Dr. H. R. Jones, with encl.

Office Payments.—Drs. Nice, Huntington, Dudley, Prfiffe, Lamb. Pierce, Rogers, Migeod, Kline, Penrose.

VITAL STATISTICS.

Of Philadelphia, for the week ending Nov. 23, 1861:

Deaths—Males, 125; females, 93; boys, 64; girls, 35—Total, 218. Adults, 119; children, 99. Under two years of age, 50, Natives, 168; Foreign, 37. People of color, 3.

Among the causes of death we notice—Apoplexy, 4; convulsions, 14; croup, 5; cholera infantum, 1; cholera morbus, 0; consumption, 40; diphtheria, 6; diarrhœa and dysentery, 3; dropsy of head, 5; debility, 8; scarlet fever, 11; typhus and typhoid fever, 3; inflammation of brain, 2; of bowels, 4; of lungs, 14; bronchitis, 1; congestion of brain, 3; of lungs, 5; erysipelas, 0; whooping cough, 0; marasmus, 5; small pox, 8.

For week ending November 24, 1860.....205
" " " 23, 1861.....218

Of Brooklyn, for the week ending, Nov. 23, 1861:

Deaths — Males, 59; females, 57. Total 106. Under five years, 49.

Among the causes of death we notice—Consumption, 20; scarlet fever, 12; convulsions infantile, 11; inflammation of lungs, 7; debility, 5; marasmus, 3; croup, 3; bronchitis, 3; dropsy, 3; diphtheria, diarrhœa, erysipelas, typhoid fever, measles, small pox, each one.

Of Boston, for the week ending Nov. 16, 1861:

Deaths — Males 32; females, 30. Total, 62. Natives, 37; Foreign, 25.

Among the causes of death we notice—Phthisis, 12; cholera infantum, 0; croup, 3; scarlet fever, 2: pneumonia, 3; variola, 0; dysentery 0; typhus fever, 2: diphtheria, 0; Whooping-Cough, 6; Convulsions, 5.

Of New York for the week ending Nov. 18:

Deaths—Males, 215; Females, 177; Boys, 124; Girls, 99. Total 394. Adults 169; Children 228. Under two years of age, 148. Natives, 267; Fo-reign, 125; Colord, 5.

Among causes of death we notice—Apoplexy, 6; infantile convulsions, 32; croup, 8; diphtheria, 8; scarlet fever, 22; typhus and typhoid fevers, 12; cholera infantum, 6; cholera morbus, 0; consumption, 56; small-pox, 9; dropsy of head, 7; infantile marasmus, 20; diarrhœa and dysentery, 10; inflammation of brain. 6; of bowels, 10; of lungs, 14; bronchitis, 13; congestion of brain, 6; of lungs, 8; erysipelas, 2; whooping cough, 5; measles, 1. 200 deaths occurred from acute disease, and 45 from violent causes.

Medical Directory.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr Gerhard.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Medical Library of the Pennsylvania Hospital—Open on Wednesdays and Saturdays.

Philadelphia Hospital.—Medical Clinic on Wednesdays and Saturdays, at 9½ A.M., by Dr. J. L. Ludlow.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A. M., by Dr. D. H. Agnew.

Wills Hospital for the Eye and Limb.—Clinics, Monday and Friday at 12 M., by T. G. Morton, M.D.

Howard Hospital, Lombard street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P. M. Monday and Thursday—Dr. Turnbull. at 1 P. M. Tuesday and Friday—Dr. Darrach, at 12 M.: Dr. Klapp, at 5 P. M. Wednesday and Saturday—Dr. Neff, at 12: Dr. Judson, at 1, and Dr. Morehouse, at 5 P. M. Monday and Thursday—Dr. Meigs, at 5 P. M. Tuesday and Friday—Dr. Atkinson, at half-past 3 P. M.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesday's and Saturday's, at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street—Clinical Lectures, daily, (except Sunday,) from 2 to 4 P. M., by Dr. Goodwillie.

Philadelphia Lying-in Charity.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning at 9 o'clock, by Dr. Albert H. Smith.

THE

MEDICAL AND SURGICAL REPORTER.

WHOLE SERIES, NO. 268. PHILADELPHIA, DECEMBER 7, 1861. NEW SERIES, VOL. VII. NO. 10.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

The Microscope: its Value as a Means of Diagnosis in Pulmonary Tuberculosis, illustrated with Cases.

By A. P. Dutcher, M.D.,

Of Enon Valley, Lawrence, Pa.

Since the publication of our remarks on the diagnostic value of a microscopic examination of the sputa in pulmonary tuberculosis, in Vol. V, page 557, of this journal,* we are happy to find that the views therein expressed are fully confirmed by Drs. J. Hughes Bennett, Andrew Clark, and Theophilus Thompson.

At the time of delivering his clinical lectures on pulmonary consumption, 1851, Dr. Thompson had paid but very little atteution to the use of the microscope as a means of diagnosis, and, from a very superficial examination of the subject, he expressed the opinion that very little could be expected from it as an instrumentality in determining the existence of phthisis by an examination of the sputa.

But, fortunately, when he was about to abandon the subject, he had an interview with Dr. Clark, who very readily demonstrated to him the true microscopical indications of tubercular sputa. A short time before his death, Dr. Thompson read a very interesting paper before the Harveian Society, renouncing his former views, explaining the true nature of the tubercular corpuscles, and illustrating them by several accurate and beautiful diagrams.

In this paper, the doctor has shown very conclusively that the sputa of phthisical patients contains materials corresponding in appearance with the elements present in the air-vessels, and that before any amount of disease can be detected either by the general symptoms or physical signs, there will not be found wanting the withered cells and shriveled nuclei. He also maintains that when the sputa contains, in addition to the withered cells, isolated masses of moleculo-granular matter, fat, and blood disks, with numerous areolar meshes, we may conclude that there is pulmonary disorganization.

In confirmation of these views, Dr. Thompson presents the history of several cases, a brief description of which cannot fail to be interesting to every practitioner who is desirous of adding to his knowledge of the natural history of this malady. We have frequently observed, during the course of these articles, that there is nothing more important than to be able to detect the existence of phthisis in its incipient stage; for, if anything can be done to remedy the disorder, then is the time to act. If this period is once passed, all past experience teaches us that therapeutical measures are of but little avail; and, if a microscopical examination of the expectoration will, in any way, aid us in making out our diagnosis in all doubtful cases, the knowledge which it is capable of affording should not be neglected. That it will furnish such valuable information, has been very conclusively demonstrated by Dr. Thompson's cases.

The *first* case which he presents is that of a man, aged sixty-three, who, after an attack of pleurisy in the left side, did not regain his usual health. Dull percussion, and prolonged expiratory murmur over a small portion of the right apex, were the only important auscultatory signs; but the expectoration, under the microscope, was found to contain withered cells, blood disks, moleculo-granular matter, and numerous areolar meshes, as illustrated in figs. 1 and 2, which are conclusive signs of phthisis.

* Medical and Surgical Reporter, 1860.

More decided symptoms soon appeared, and he fell a victim to the disease in a few months.

Fig. 1.

Fig. 1: *a*, withered tubercular cells; *d*, tubercular granules.

The *second* case is that of a lady aged thirty-nine. The first sickness of any severity that she suffered, was during the winter of 1855, and was supposed to depend upon some gastric difficulty, the precise nature of which could not be accurately determined. The persistency of the disorder and the progressive emaciation led to an exploration of the chest. Some dullness was elicited on percussion, and increased vocal thrill was observed near the sternal end of the second intercostal space on the right side.

Fig. 2.

Fig. 2: *a*, tubercular cells; *b b*, molecular-granules; *d d*, pulmonary meshes in a perfect state.

The expectoration was carefully examined by the microscope, and was found to contain shriveled cells, lung-tissue, and isolated masses of granules. She was put upon the use of cod-liver oil, and hygienic treatment of a soothing kind was instituted, and there was a marked improvement in her health. But, early in the year 1856, the expectoration became more copious; dullness on percussion was more extensively obvious; near the inferior angle of the scapula, clicking was audible, shortly followed by cavernous breathing, and other grave symptoms of pulmonary tuberculosis. She died in March.

In this case, almost from the very first, we find the principle signs of the disease in the sputa. Although dullness and increased vocal thrill was observed, with cough and emaciation, yet they did not point out the nature of the malady, for these signs are sometimes present in bronchitis and pneumonia. The microscopical examination of the sputa at once gave a direct clue to a correct diagnosis of the case. This opinion is fully sustained by a third case, which Dr. Thompson presents in contrast to this.

A woman, aged thirty-eight, had precisely the same physical signs; but the occasional slight cloudy expectoration, from time to time examined by the microscope, exhibited ciliary cells, some with long tails, probably tracheal, some in masses, as though from follicles; but there were no tubercular elements. In harmony with the encouraging testimony thus afforded by the microscope, the general symptoms continued favorable, and have, during a period of five years, notwithstanding an accomplished auscultator, had previously pronounced the most unfavorable prognosis.

The following case is given by Dr. T. to show that a microscopical examination of the sputa is useful in confirming doubtful signs. Mr. ——, aged fifty, in the winter of 1854, had a cough, copious expectoration, hurried breathing, and some symptoms of hectic. The left lung had been extensively consolidated, in consequence of pleuro-pneumonia, ten years previously. Over a small space, near the lower angle of the left scapula, a sound could be heard, which it was difficult to determine, whether the correct designation were sub-crepitation or clicking.

A portion of the expectoration was sent to Dr. Andrew Clark, for microscopical examination. The doctor reported that it contained shriveled cells; large cells with shrivelled nuclei, and some earthy matter. And without having had a previous history of the case, he gave the diagnosis of "slight tubercular deposits tending to restoration," a diagnosis which was confirmed by the subsequent history of the case. The conversion of tubercles into cretacarious masses, is generally regarded as a curative process, and when found in the expectoration it is looked upon as a favorable sign. The case, at least, is still considered as hopeful. I have, on several occasions, found cretacarious matter in the expectoration, with the microscope, when it could not be detected with the

eye. Tubercular matter, however, may be transformed into cretacarious masses in the lungs, without their being an appearance of it in the sputa.

In the summer of 1854, Doctor T—— was called to see Mr. ——, aged twenty-two. On examination, there was dullness on percussion, and a murmur over the left pulmonary artery, but no crackle or clicking; the expectoration, however, exhibited lung tissue, tubercular corpuscles, and blood disks. He took codliver oil freely, at one period, to the extent of a pint and a half in a week, and had ioduretted neats-foot oil, (a grain to the ounce,) rubbed into the chest. After a time the expectoration became chiefly bronchial, and free from lung tissue. After spending the winter in Madeira, he returned in the latter part of the spring, quite improved in health.

Dr. Thompson introduces this case to prove that the microscope affords us evidence of amelioration of the pulmonary disorder, and furnishes the medical attendant such indications as will lead him to persevere in the use of such means as will have a tendency to counteract the diathesis and repair the local lesion. Nothing, in our judgment, is more conclusive of amendment, than the disappearance of the withered cells, the shrivelled nuclei and lung tissue in the sputa of a phthisical patient.

The microscope, also, sometimes furnishes very important evidence of the rapidity of the pulmonary disorganization, and its fatal termination. Dr. Thompson illustrates this by a case, where the individual had been in a decline for two years, but whose friends did not fully realize the danger. Some expectoration sent to him for examination, contained blood, copious corpuscles, and numerous large meshes of pulmonary tissue, perfectly retaining their form and elasticity. A very unfavorable prognosis was given, which was verified by the death of the patient in a few days afterwards.

In this paper, Dr. Thompson gives it as his decided opinion, that the microscopical inspection of the sputa affords, at a very early period of pulmonary tuberculosis, knowledge in relation to the nature of the malady, that is not otherwise attainable. And that the microscopical examination and study of the sputa opens up a very important chapter in the progress of medical science, and that it should not be discarded by those who wish to become proficient in diagnosticating the various disorders of the chest.

Dr. Hughes Bennett, of Edinburgh, although at first exceedingly skeptical as to the value of the microscopical examination of the sputa, as a means of diagnosis, has recently added his testimony to its importance, and concurs with Doctor T. in recommending its careful study.

Dr. Andrew Clark, of London, whose name has already been alluded to, has recently published in the British Medical Journal, a very scientific article on this subject, and he gives it as his decided opinion, "that the examination of the sputa is useful at all periods, as being the only certain means of detecting the disintegration of the lungs and the increase of the disease."

With such testimony in favor of the value of microscopical examination of the sputa as a means of diagnosis in phthisis, it makes us feel a little combattive, when we hear individuals affirm" that there is nothing found in the sputa of phthisical patients, which is conclusive of the existence of the disorder, and that those who claim that there is, are laboring under a delusion." Persons entertaining such views, as a general thing, have never made the subject one of special observation and study, and when they affirm these opinions, we set them down as very little worth.

The introduction of the microscope is a new power in the field of medical practice. And like all intruders, it will encounter hostility and bitter opposition; and no strange thing has happened to it, when it is condemned, before its merits have been fairly examined and fully tested, for the very same thing has occurred to nearly every great discovery that adorns the temple of science. Take, for example, the art of auscultation. For how many years did its advocates encounter the stormy waves of opposition. I can remember the time when they were denounced by those who stood high in the profession. But the scene is now changed; its utility is universally admitted; and there is not an individual in the ranks of the profession, who has any regard for his reputation, that would stand up and seriously controvert its value.

But opposition is not without its use, either in science or morals. Its influence is frequently beneficial in causing more thorough and accurate investigation to be made, in order to furnish stronger evidence in proof of any alleged discovery or improvement. The nature of the principles thus involved, becomes thus better understood, and their limits more clearly de-

fined and definitely settled. Another beneficial result is, that it tends to prevent too hasty improvements or changes in practice, which would otherwise occur, as growing out of new discoveries. As a general thing, such transitions as have a tendency to produce a radical change, either in society or science, to be useful must be *gradual*. The understanding must be thoroughly enlightened, all the intricate principles connected with the subject must be unfolded, and when submitted to the analysis of reason and judgment, they illumine the mind, and the murky clouds of error flee before the brilliant light of science.

Remarks upon the Treatment of Fractures of the Femur by Weights and Pulleys.

By J. Swinburne, M.D.,
Of Albany, N. Y.

In Vol. 2d, page 214, of the American *Medical Times*, will be found the synopsis of a paper read by Guerdon Buck, M.D., and entitled "*A new method of treating fractures of the femur.*"

Here he entirely does away with long splint and confines the limb by means of an elastic perineal belt, and an elastic extension apparatus to the foot, and connected with a rope which passes over a pulley and attached to a weight.

I was among the many who had the pleasure and good fortune of listening to the lucid and able production of that accomplished surgeon. It gave me great pleasure to see others working in the field of humanity to rid us if possible of some of the cumbersome machinery now in use for the treatment of fractures.

The doctor has certainly demonstrated one point which is of importance, and that is, that it is not the *splint* but the efforts of nature which unites the bone, and that our duty clearly is to place the bones as nearly as possible in apposition, and nature is not slow to do the work; and that the more nearly the bones are in apposition the sooner will union take place.

The doctor, however, very modestly, like true genius, makes no claim for originality, but says that "this method was suggested to him by observing its happy application by H. C. Davis to the treatment of morbus coxarius."

I have examined the subject carefully, and viewing it in the most powerful light can see no analogy between Davis' splint and the weights and pulley. The apparatus for the treatment of morbus coxarius whether Davis', Sayers, or any other, seeks to obtain fixed points, *i. e.* extension and counter-extension. The apparatus is confined to the hip by the perineal belt, and to the foot or knee by means of adhesive plaster, extension is then effected and maintained so as to remove the pressure from the diseased joint, and overcome spasm of the muscles, which, by acting powerfully, occasionally dislocate the hip joint. Now, this is exactly the grand desideratum in the treatment of fractures, *i. e.* extension to the normal length and maintenance of the same until union takes place. Does Dr. Buck's apparatus effect this end? Let us see what it does do. The doctor uses the elastic perineal belt, as well as an elastic extension foot belt, and depends upon a weight passed over a pulley to maintain the requisite extension, and not the permanent extension, as is the case in the instrument for hip-joint disease. And here it seems to me that he is presuming too much upon the strength of muscles, while one leg is comparatively weak, another of the same apparent strength is much stronger, and requires much more weight to maintain proper extension. Dr. Buck stated "that by this arrangement elasticity is combined with extension." Elasticity in the Davis apparatus is very small, there being only a short bit of elastic tubing in the perineal belt, and this can as well be dispensed with. The question naturally arises as to how much force is required to maintain extension when once fully effected? I find very little force is requisite, and little uneasiness is manifested by the patient under treatment, where extension is positively maintained, even less than where elastic straps and weights are used to effect the full normal extension, and particularly where spasmodic action of the muscles have full sway, as is familiarly demonstrated in veterinary surgery, *e. g.* pulling of the horse's tail, it will be noted that every source of irritation causes the animal to spasmodically draw it down, even the presence of a fly will bring on spasm of the organ. Now, suppose it was important to maintain the tail in this position. I think other means besides weights and pulleys would have to be used to effect the desired end. You would require to place it, 1st, in the desired position and maintain it there. There is another point to which I would call attention. In Dr. Buck's plate (exhibited

at the meeting of said society,) representing his mode of treatment, his counter extending perineal belt is entirely too small. He cannot maintain the requisite length of limb without producing excoriation and perhaps slough, (which he acknowledged had occurred in one instance.) The next objection is, that the belt extends through the centre of the body and over the horizontal portion of the pubis, which would be very likely to produce slough from any great pressure being applied over it—besides this, the counter extension is at least four inches out of the long axis of the femur. This belt should be two inches in diameter for an adult, and passed over the groin at a point where the tissues are soft, while the two ends of the belt should join just over or above the crest of the illium, and thence upward by the side of the body, that its line of traction may be in the direction of the long axis of the femur. As to the necessity of elastic lateral support in the form of india-rubber circular straps and pieces of splints encircling the thigh to follow up the shrinking of the limb as the swelling subsides, I have yet to learn that nature does uot effect all these requisites without the aid of the elastic bands. The skin and cellular tissue stretches and contracts each in its turn to accommodate all the whims of nature.

Dr. Buck stated that he could not claim for the method which he advocated the same good results as Dr. Swinburne, by *simple, fixed extension* and counter extension. He says, "I have a case now under treatment for the last four weeks, where the shortening is one inch."

Through the politeness of the resident surgeon at the New York City Hospital, I saw several (I think about twelve) patients under treatment by Dr. Buck's method, and under his special supervision some of them. The patient had stretched the elastic perineal belt to the degree that the knot at the sole of the foot rested against the foot of the bed, or the weight rested on the floor. In these cases, the limb would be materially shortened. Others, to ease the perineal belt, would draw themselves up in bed until the belt was lax. I found, however, that it possessed this advantage over the long splint, that, if there was any distortion at all, it was in the long axis of the bone, and hence presented no apparent deformity. This is also true of fixed extension and counter-extension.

As to its "maintaining uninterrupted and efficient extension," I think him mistaken, if he means extension to the normal length of the limb. Among all the cases under treatment, there were none with less than half inch shortening; while some of them were one and a half inches short. Still, to the eye, they appeared perfect, from there being no lateral deformity.

His enumeration of second, third, and fourth of its advantages, are equally applicable to fixed *extension* and *counter-extension*, which does not require splints to complete the dressings. Counter-extension is made, according to his plan, by a piece of "India rubber tubing three-quarters of an inch in calibre, stuffed with a skein of cotton or lamp-wick." This is passed through the perineum, and so "in the direction of the *long axis* of the *body* (not the long axis of the *femur*) to the head of the bedstead." In conclusion, I will state some of the objections to the use of elastic extending and counter-extending bands, with weights and pulleys:

1. It admits of spasmodic contraction of the muscles.

2. It presumes that all muscular tissues are equal in tone and strength, which is by no means the fact.

3. Were there to be appplied a trifle too much weight, the object would be defeated by absolute separation of the bone.

There is much difficulty in ascertaining the exact degree of weight necessary; and this difficulty is increased by the elastic band for counter extension and that for extending. Should you apply a weight apparently sufficient, you may find, at your next visit, that the muscles have relaxed more than sufficient. If you reduce the weight, you may find, at your next visit, that the limb is too short. Again: if your patient stretches his extending band, by drawing himself down in bed, so that his foot rests on the foot-board, the weight only expends its force upon the foot-board, or else rests on the floor.

In *permanent* extension, however, it is obvious that none of these inconveniences can by any possibility occur. Both methods possess in common this advantage, that if the limb happens to be too short from overlapping, in no instance can there be any deformity, as the straight line will always be maintained.

The method of extension is extremely simple, and can be carried out by any surgeon who can measure from the anterior spinous process to either maleolus.

In cases of intra capsular fractures, I have, of late years, dispensed with the perineal belt,

and the result equalled my most sanguine expectations, and warrants its continuance. The treatment consisted of weights and pulleys, and elevating the foot of the bed. Patients thus treated were even more comfortable than when lying in bed without any dressings at all, and certainly the results are more favorable, and some of my cases have resulted so well that the gait does not discover any faulty condition of the limb, nor does measurement reveal more than from three-quarters to an inch of shortening, while the patient says there is no difference in the two limbs.

Although this method is so applicable to the aged and enfeebled, it would be presuming too much to seek to apply it to fractures generally, and particularly those occurring in younger persons. From my own experience, it appears insufficient for the treatment of *any* but intra-capsular fractures.

By this means the body impinges against the bed, which acts as an inclined plane, and really plays the part of Dr. Buck's counter-extending elastic belt.

If extension were used in this way, in every case of intra-capsular fracture, I trust we should find less impacted intra-capsular fractures. This impaction is oftener caused by mus cular contraction than by any other means. The bones cannot so readily ride by each other outside of the capsular ligament, and hence the bony *impaction*.

Diphtheria and Diphtheritic Paralysis.

By Dr. J. Williamson.

Of Ottumwa, Iowa.

I propose to give you a few lines on Diphtheria, Diphtheritic Paralysis, and Spinal Meningitis, which you can dispose of as you think best.

Diphtheria has prevailed here since the spring of '60, and has manifested itself in every conceiveable form. For the past six months there were but few fatal cases, and these were mostly of a croupal character. The laryngeal fibrous deposit appeared in very many others, which made a happy recovery, although, perhaps, for a period of one or two days, no one could feel any assurance that each hour would not be the last. In many instances the fibrinous membrane was detached, and under the use of emetics was discharged in considerable quantities. Some specimens were the size of a dime, of a clear lustrous white color and tough leathery consistence. The emetics used were always chosen with reference to this depressing effect. Alum, sul. zinc, sul. copper, were used more than any others. In some cases an emetic was given as often as once every twenty four or thirty hours, in succession. Quinine and brandy being used simultaneously, as the powers of the system were seen to flag. Of this class, thus treated, five out of every six recovered.

As the season advanced, the disease assumed a greater malignancy, most of the cases passing through a tedious convaleseence. Pallor, petechiæ, and great nervous prostration, spoke in unmistakeable terms how deeply it had struck into the fountains of life. In a few cases gangrene occurred, commencing as a dark red point on the forehead or nose, and gradually deepening in color and enlarging, until the patient died. In one case, the gangrene involved the extremities—two fingers of one hand and a finger and thumb of the other. The last few hours of the patient's life the march of the gangrene was surprisingly rapid, travelling over the whole of the first of the bones of the little finger, and an inch over the metacarpus, in about seven hours. Besides the gangrene of the hands, this patient's nose, ears, forehead, and chest, exhibited numerous circular points, varying in size from those of a pin's head to a quarter of an inch in diameter. It may be noted, that this patient had gone through a severe attack some four months previous, although he seemed to have recovered his usual health before he was attacked the second time. His last illness was but a weeks's duration.

The treatment of this class of cases, consisted in the use of brandy, quinine, iron, and chlorate of potash internally, with nit. of silver to the throat. My experience with this article has been such, as to induce me to lay it aside as useless, if not positively injurious, and I have nothing to say in favor of local medication, beyond what may be necessary to keep the mouth well cleansed. An experience reaching to nearly four huudred cases, has afforded me an opportunity to try every article that I had seen recommended, as well as many of my own devising. and all have proved alike unsatisfactory. I have doubted whether my local applications in any degree subdued the hyperæmia, much less limited the fibrinous exudation.

As the epidemic assumed a more malignant type, local paralysis was superadded, and im-

posed a most tedious and embarrassing convalescence.

Paralysis of the pharyngeal muscles, rendering the swallowing of liquids impossible, was the most common form. Partial amaurosis was witnessed in one case. A few months later, and cases appeared in which the paralysis was more general.

August '61 afforded me the first case of paraplegia. It occurred in a child two years old. The attack came on with fever, which lasted four or five days. As the fever abated, it was noticed to gradually lose the power of moving both legs and arms; up to this time there was some redness, but no exudation in the throat. From this point there was a gradual return to health, leaving the paralysis, which to day is as complete as at any time previous. More than three months have passed, in which iron, strychnine, quinine, passive motion, frictions, rubefacients to the spine, have been faithfully tried to no effect.

A few weeks later, a second case occurred, differing from the other in the absence of fever and sore throat. Some swelling of the cervical glands existed; further than this nothing existed to point out the existence of diphtheria until it was noticed, by the mother, that it had lost all power of holding up, or in any way controlling the movements of the head. In its complete helplessness it was, as the mother expressed it, more like a pumpkin than the head of a two years old child. Its cry was peculiar, much like the whining of a puppy. A day or two elapsed, and its arms and legs dangled as dead appendages to the trunk. Now began to appear some of the common marks of diphtheria; fauces slightly hyperæmic, tonsils somewhat enlarged, and presenting the peculiar honeycomb appearance, so often seen in this disease, but no membranous deposit was to be seen at any time. The child's general health was soon restored under the use of tonics and stimulants. Substantially the same treatment was adopted, as with the first, using however, in the course of the treatment, a greater variety of articles, strychnine, tinct. iron, tinct. cantharides were made the main reliance. The child slowly regained control over the movements of the head; voice has become natural, and the use of the arms is in some degree restored, but the lower extremities remain without any perceptible improvement.

A third case, presenting some points of divergence from either the above came under notice October 14th. The patient, a lad of ten, when brought to me by the mother, who assisted him to walk, swayed back and forth like a drunken man, and was, with difficulty, made to keep the sidewalk. This unsteady gait, with an occasional deep inspiration, and a disposition to lock his hands over his head, showing that the muscles of respiration were also involved, afforded the only evidence of disease.

A candid statement, in regard to the nature and probable course of the disease, occasioned me the temporary loss of the patient. He passed into the hands of a quack, who tinkers in law, medicine, and divinity, who steamed and stimulated externally and internally about two weeks for his "nervousness," but as he grew worse daily, I was requested to take him under treatment again. By this time the case was hopeless, the paraplegia was complete, respiration was performed with great difficulty, and food was refused because of the great difficulty of swallowing. The last three days preceeding his death, the mucous and salivary secretions became so abundant, and were so tenacious, and on account of the paralysis of the pharyngeal muscles, so difficult to get rid of, that his life was in hourly jeopardy from suffocation.

He lived but five days after I resumed attendance. The immediate cause of his death I should say was paralysis of the respiratory muscles. Unsatisfactory as had been the results of the treatment adopted in the cases before treated, I could think of nothing, which to my mind, promised better success. Electricity I was not prepared to make use of, or I should have tried it. The urine of this patient was tested for albumen, but yielded no positive results.

While this case was under treatment, a younger brother was affected with strabismus; a day or two later a paraplegia was established. Gave ergot and strychnine. He is nearly well, but I do not claim it as the effect of the treatment.

How shall such cases be treated? And what shall we say of their occurring without previous well-marked diphtheria? Will it be claimed they are sequelæ, that the disease had existed in a mild form, and passed unnoticed. It should be remembered that in the present state of public apprehension, the slightest hoarseness and complaint of the throat, receive an unusual degree of attention. Do not such cases go far to settle the question as to

whether diphtheria is, or is not in the beginning a *local disease?*

On this point take another case for illustration. Two days ago I dismissed a little girl who had been sick of diphtheria. To-day the mother tells me that for twenty-four hours, she (the mother) has been unable to see objects with any distinctness. Complains of headache, pain in the back, vertigo, and faints with every attempt to walk across the floor. The throat presents a little redness, but no exudation. Are the general symptoms the result of the local disease, or can we admit that there is any intimate relation between them?

Take another case. October 18th was called to see a little girl of eleven years who had been sick two days of diphtheria, so slight as to hardly claim attention. Was said to have had a little fever two days before. At 3 o'clock, P.M., she was feeling quite well, was interested in her book as much as usual, and insisted on going to school. Prostration came on, and in two hours she was dead.

The local affection was here but slight, the exudation was in no degree abundant. That it had anything to do with her death is so absurdly impossible, that my mind refuses to entertain the supposition for one moment.

I had intended to report some cases of spinal meningitis, but lest I should become too tedious I will only give a few facts. Since the time diphtheria made its appearance here, nine cases of spinal meningitis have come under my notice. I had practiced medicine in this community the eight preceding years without seeing or hearing of a case. Other practitioners report a number of cases occurring in their practice.

Of the nine cases alluded to, six were children and three adults. In one it followed diphtheria. In another it came on while the patient, an adult, was suffering from a severe attack of the same. In none of the rest was any connection discoverable. The symptoms, which were best studied in the adults, were not violent in the beginning; but little constitutional disturbance. In most cases there was a slight fever for two or three days, after which, while other symptoms might be aggravated, the fever abated. Great tenderness of the spine, pressure upon which would in some cases develop violent muscular contractions. In one case the noise of a wagon passing alone the street was frequently sufficient to bring on the most painful spasms, lasting for ten or fifteen minutes. In most of the cases the muscles of the back and neck were in a state of rigid tonic contraction, coming on about the time the fever abated, and lasting with the life of the patient, or until convalescence was established. In the cases that recovered, they became convalescent in from ten to fourteen days, although neighboring physicians report cases lasting four and even six weeks.

Of the nine cases six proved fatal. One of these was fairly convalescent, when a careless nurse allowed it to fall to the floor, and a return of the symptoms, and in a few days death was the conseqaence.

The treatment which seemed to promise most, was stimulants and tonics, especially quinine and chlorate of potash.

In viewing these cases it is difficult to avoid the conclusion, that this is but another form of diphtheria. But how shall I treat my cases of paralysis?

——o——

The character of the true physician shines the brighter for the surrounding gloom and darkness of death, when reason gives hope.

"Cool thro' the veins your pleasing comfort glides, the heart beats glad,
The fresh expanded eye and ear resume their watch,
And life shoots swift thro' all the lightened limbs."

The great Author of our faith and means of our salvation, when upon earth, did not disdain to practice the healing art—giving eyesight to the blind, opening the ears of the deaf, and loosening the tongue of the dumb, expanding the shriveled limbs, and causing the lame to leap for joy. A profession thus stamped with the signet of Divinity, should not be pursued as a trade nor made merchandize of; but as a Divine Art, held in hands purified in the holy waters of benevolence and charity, and guided by principles of righteousness—not for gain alone, nor the vain world's applause, but for the love of humanity. Let no one enter within the sacred portals of its temple pharisaically, but rather as a humble worshipper at its most holy shrines, that he may return justified. In view of the character of the true physician, approaching that of Divinity itself—well did the Roman orator, in the fervor of his affection for the profession, and the freshness of his feelings, exclaim—

"Homines ad Deos nulla re proprius quam accedunt salutem homnibus dando."

[*Dr. McPhail's Address.*

Liebig's Patent.—Baron Liebig has just had patented in this country a process for electroplating the silvered surfaces of mirrors with copper and other metals with the object of protecting them.

Illustrations of Hospital Practice.

PHILADELPHIA HOSPITAL.

Nov. 27, 1861.

MEDICAL CLINIC.

Service of Dr. L. J. Ludlow.

DYSENTERY—CHRONIC PERITONITIS.

This was the case of a female, 54 years of age, who had, when she came into the house, well marked symptoms of dysentery, with frequent bloody evacuations, which she says came on first as a diarrhœa, but for ten days past have been more or less bloody, for which she was placed under the ordinary treatment—enemas, blue mass, acetate of lead and opium, and suppositories, with the effect of arresting the discharges in part; they are still mucous. In addition, she has taken the favorite preparation in this house for such cases, viz., the burnt brandy and tannin, under the use of which she has improved. In the treatment of dysentery, rest, and the recumbent position, are all important, and especially in this case, because there is, in addition to the other symptoms, prolapsus of the rectum, a complication which sometimes occurs also in children, and occasions not only great alarm, but is exceedingly annoying, and to reduce which requires some skill in manipulation.

But, you will observe, this patient is exceedingly feeble; dysenteric discharges tend strongly to produce an anæmic condition; her pulse is feeble; tongue clean, indicating no disturbance of stomach; but her abdomen is enormously distended, protuberant, and tympanitic; less so upon the right side, however; there is no tenderness, nor is there any pain; she is apparently very comfortable; there is now no blood in the discharges; they are a brownish yellow in color, and are less frequent. What is the condition presented here? There has evidently been some peritoneal inflammation of a chronic character, and some adhesions are probably the result, and there is no doubt gas in the peritoneal sac. The prognosis is unfavorable, and yet recovery is possible. The absence of pain, and of nearly all sensibility, the patient lying in this apparently easy, comfortable condition, is not an omen of favorable results. A similar case occurred recently in this house, which proved fatal, the patient being very much prostrated on entering, and being in the wards only twenty-six hours before she died. Such may not be the result in this case. The only treatment which I think necessary to prescribe, in addition to that already employed, is to rub the whole abdomen with an ointment composed of

℞.	Potassa iodidi,	ʒi.
	Camphoræ,	ʒj.
	Cerat, simp.,	℥i.

Her diet should be nourishing and strengthening, and stimulating according to circumstances.

10*

GENERAL CACHEXIA ARISING FROM AN ALTERED OR POISONED STATE OF THE BLOOD.

A volunteer, from Ohio, who was in the battle of Bull Run; health always good, stout, and robust, Three weeks after the fight he was taken with nausea, and pain in his side, with some dyspnœa; pain sharp; slight cough, with rusty expectoration. Took potash, he says, and got better in a week, but did not return to ranks; stayed about the tent; no appetite. Finally was discharged, and came on here; was at Refreshment Saloon Hospital, and went from thence to Military Hospital on Christian street, where he was sick in bed, the pain in side and dyspnœa being the prominent symptoms, which have entirely disappeared. From that hospital he came here. You observe the peculiar dusky hue of his countenance; his eyes have the same hue; his pulse is very feeble, no volume; skin dry; tongue slightly coated, edges red; his respiration is good; no tenderness of abdomen, but slight flatulency; spleen not enlarged; chest resonant on percussion, with some sub-mucous ronchus in the back part, slight dullness over liver, which is slightly enlarged; urine dark colored, but no deposits; complains now of no pain, but constantly inclined to sleep; strength failing, and he is gradually becoming more feeble, and intellect more sluggish.

There is in this case no lesion of any organ apparent, which should give rise to these symptoms, but there is a general torpor of the whole system. The lesion is apparently in the blood, which has become poisoned. Several cases of this nature have come under my observation, in soldiers returned from the war, the prominent symptom in which was the same general torpor of the system, with a gradual sinking of the powers of life, as you observe in this case.

What treatment should be pursued? In each of the cases I have referred to, the remedy used was the chlorinated water, or water saturated with chlorine gas, or when that cannot be procured, Labarraque's solution of chloride of soda, a teaspoon full every two hours, and the result was the speedy and effectual recovery of the patients, in each instance. Chlorine, I have observed to act well and favorably in all these cases of evident blood poison. How it acts we may not be able to determine definitely, whether from the presence of chlorine or azone, you may speculate. This man should be kept quiet. I will give him no quinia, as he has taken sufficient elsewhere, and the state of his brain appears to contra-indicate it; counter-irritants may be applied over the region of the liver, and he may take the remedy just mentioned, together with the best diet the house will afford, and moderate stimulation, and I shall expect a favorable result.

P. S.—Since the above report, the patient has left the house with all his symptoms improved. Intellect clear, and hue of skin changed to a more ruddy and natural tone.

—o—

A Hospital Income.—The *British Medical Journal* says that the annual income of St. Bartholomew's Hospital, London, is about $180,000.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.,

AN INTERESTING CASE—BRAINS AT A DISCOUNT.

Since the authentic statement of the recovery of the man who had a crowbar driven through his head, we are prepared to believe almost anything in regard to recoveries after head and brain injuries. In fact, we are not quite sure but that an idiot might have his brains removed, and those of a dog put in their place, and he recover, with at least the common intelligence of a dog.

Apropos, we would remark that we once heard a noted quack relate a case in a bar-room, to a crowd of credulous listeners, to the effect that he once took a male patient, suffering from inflammation and gangrene of the intestines, from the hands of a regular physician. He ordered a sheep to be brought to the door; he then immediately opened the man's abdomen, removed the intestines, and then turned and opened the abdomen of the sheep, and, removing its intestines, placed them in the place of the diseased human intestines thrown away. The only accident following so heroic a procedure, *was the circumstance of the man being delivered, a few weeks after, of twin lambs ! !*

But to the case under consideration. In the *American Medical Times* for October 19th, Dr. George B. Wilson, of Port Huron, Mich., reports a case of injury of the brain, of a very severe nature, in which recovery was speedy and complete. In firing a gun, it exploded, and the breech pin and other matters were driven into the forehead. The foreign substance was removed with much difficulty. "The mass consisted of a *screw*, about three inches in length, and the *breech-pin* of the gun, through the middle of which the screw passed at nearly right-angles. The breech-pin was a piece of iron about the size and shape of a good sized little finger, tapering at one end to a tolerably sharp point, and at the other end being cylindrical and blunt, and of about five-eighths of an inch in diameter. The large end had lain upwards, and the pointed end downwards, and being small enough at the point, had probably protruded into the back part of the orbit. The next step was to find and extract such other fragments of iron or bone as had been driven into the brain by the explosion. As the cavity now seemed quite large, in fact, as if all the anterior and a part of the middle lobe of that hemisphere had been destroyed, I did not hesitate to scoop out the disorganized cerebral substance with considerable freedom, and I do not think there could have been much less than a teacupful extracted. I then probed the wound deeply with my finger, and in passing it back where the larger end of the breech-pin had lain, I felt, at the depth of over four and a half inches (by measurement,) two pieces of bone plate, each nearly half an inch in diameter lying, back in the *posterior* lobe of the cerebrum. These I extracted with long, narrow forceps, and afterwards several smaller pieces, and many particles (mere crumbs) of bone from other parts of the cavity." There was nothing peculiar about the dressings. On the fourth day, "the cerebral substance had grown so as to fill the cavity to the skull." The dressings consisted of a firm compress and bandages. This caused so much pain, that the attendants permitted the removal of the dressing, and *hernia cerebri* resulted. Three days after the second dressing, the Doctor saw the case, and by strapping down tightly a firm compress, the brain tumor was confined within the cranium, and confined there without regard to pain. The author says: "He was able to walk about in less than three weeks after the accident, and felt well most of the time, having to take medicine internally only twice." He was discharged cured at the end of the fifth week.

A singular experiment was performed in this case. While the cranium remained open, the Doctor inserted his finger "as far as it would reack back," touching the brain substance at various points, and inquiring after the sensations. The sensation which determines locality, and the sensations of hardness, softness, coolness, or warmth, were perfect; in fact, the patient said he "could feel everything in there just as plainly as in any other part of his body."

It seems a little surprising that four days should be sufficient for the reproduction of so large a portion of brain substance—large in actuality, and relatively to the whole—and that healthy and perfect in all its functions.

DYSENTERY.

In the *Boston Med. & Surg. Journal* for Aug. 29th, Dr. C. D. Griswold, of Cleveland, Ohio, has an article upon dysentery, in which he seems to think he has succeeded in pointing out a method of treatment that will be found more speedy and successful "than that generally advocated by text-books and the profession." Dr. Griswold regards dysentery "as essentially a malarious disease." While in the service of the Panama Railroad Company, at Rujio Saldado, he says he "soon learned that quinine was as essential in cutting dysentery short, as it was in accomplishing the same end in the treatment of the intermittent and remittent fevers—thus sustaining the opinion as to its malarious origin, instead of regarding the fever as a complication, as some would have it."

That dysentery may be modified by malarious influences, when occurring in certain localities, we have no doubt; neither do we doubt that, under such circumstances, quinine may form an important part of the treatment. But while making these admissions, we must say, we know it may, and often does, occur apparently independent of that specific malaria which develops intermittent or remittent fever. It was our pleasure to be born and reared to manhood in a locality where the above mentioned fevers were never known to originate, and it is now

our pleasure to practice in a locality in these respects similarly situated, and yet in both these localities dysentery was and is by no means an unknown disease. It may be more common in malarious regions than in others, but this does not establish the fact that it has a malarious origin.

In the treatment of this disease, he condemns blood-letting, calomel, cathartics, conjointly, or alternating with opiates, and gives the following as that preferred by him: "The practice which I have found pre-eminently successful, consists mainly in the administration of powders composed of Ind. rhei, grs. ij. ; opii and ipecac., aa. gr. ss. In preparing these powders, I triturate the ingredients thoroughly in a mortar, combining a little white sugar. When there is indication of acetous fermentation in the stomach and bowels, add a little subcarb. soda. When there is obstinate constipation, increase the rhubarb; if the bowels are relaxed, lessen it. If fever runs high, increase the ipecac. until nausea is produced. The rhubarb will work its way *through* the bowels, *and carry the opium to the seat of the disease*, (the italics are ours,) preventing the formation of scybala, or the necessity of other cathartic remedies. When there is no fever at the commencement, I give quinine to the adult in four-grain doses, alternating with the above powder, every third hour. When there is well marked pyrexia, wait until a distinct remission before giving the quinine; it should be continued until 16 to 20 grains are taken, or cinchonism is produced. With this simple treatment, commenced early in the disease, the great majority of cases will be cut short within forty-eight hours, and the patient may be permitted to go about his business.

Referring to the part of the sentence italicised, we would inquire of the Doctor if he supposes that the good effects of opium in this disease are due to its local action?—To its action by contract? Does the rhubarb carry the opium down to the diseased surfaces, there leave it to do its work, while it (the rhubarb) passes off? We suppose the good effects of opium are due to its systemic influence—to its absorption into the system. If opium can, by combination with a cathartic, be so hurried through the bowels as to prevent its absorption, the good effects it is capable of producing will be correspondingly diminished. We would not be understood as objecting to the compound—we simply object to the explanation of its action.

Dr. Griswold does not speak favorably of cathartics in dysentery. Bearing upon this point, a distinguished physician and surgeon, and for some years a public teacher of medicine, who joined the Ohio volunteers, and has been in active professional employment since in Western Virginia, says:—"By the way, I have had very decided success in the treatment of both this (camp) dysentery and diarrhœa, with the employment of Rochelle salts purgatives." For several years back we have been in the habit of using Epsom salts in certain combinations, and with the most satisfactory results.

In the *Berkshire Medical Journal* for August, Prof. Wm. Henry Thayer has a very able and interesting article upon this subject. We make one quotation: "Since 1852 I have followed a very different plan in the treatment of dysentery. My patient is put at once on frequently repeated small doses of a saline cathartic. I commonly employ the sulphate of magnesia in doses of one drachm, repeated every four hours. The object is not to get rid of scybala. If I had any reason to suspect their presence, I should give a full cathartic dose of castor oil at once. The object is to relieve the inflammation (or if used at the outset, the congestion) of the mucous membrane, by procuring a free serous discharge from its surface. That this effect is produced, to the great relief of the symptoms, and usually to the speedy cure of the disease, I have frequent evidence. This will be better understood if I describe the course. A patient is having frequent dysenteric discharges, with all the other symptoms. He gets one drachm of sulphate of magnesia, in concentrated solution, (which is important,) every four hours. The next day I find that his discharges have become large and watery, with little mucus and less blood, are less frequent and less painful. If they have thus improved, I reduce the frequency of the salts, but have it continued every six hours. On the second day my patient has only one or two discharges, watery, and absolutely without blood or mucus. The medicine is ordered once in eight hours, and the next day I find he has had no evacuation at all, and the medicine is omitted. This is the end of the case—for he goes two or three days without any evacuation, if he is careful, and then has a natural discharge. The pain and tenesmus have usually disappeared at the end of the first twenty-four hours, without any opium whatever. This is the history of *four* cases in *five* of dysentery, when I see them at the beginning. If the case is more advanced, it does not yield so readily, and may require an opiate at night, while the salts are given during the day. I have sometimes given the salts less frequently, with less favorable results. I have had reason to think that when the symptoms did not yield, it was because the medicine was taken at too long intervals. I prefer to withhold opium, in order that the salts may have their full effect; during the first day, the patient can be soothed and relieved by sinapisms and fomentations, with flannel bound around the body; and after this the pain is relieved. My own favorable experience of this mode of treatment has been corroborated by others. I am unable to recollect the source from which I first derived the idea, but I have endeavored ever since to disseminate it, and I have had the pleasure within the last six months of seeing the plan advocated in several medical journals."

We commenced the use of epsom salts in dysentery, in 1855, and its action has pleased us so well that we have sought for no better remedy. We have, however, used it in combination, and, in the last six years, have not lost a case of dysentery, with one exception. The exception was the case of a child under one year of age, to which we were called after several days duration of the disease, and the remedy could not be, or, rather, was not administered.

In May, 1855, Dr. D. B. Dorsey, of Cincinnati, Ohio, in a letter to Prof. George Mendenhall, gave his method of treating dysentery, in which letter he thus sums up his experience: "More than twenty years' experience in the use of this agent, has convinced me that there is not a more reliable one in

the Materia Medica. In a practice, not very limited, in the cities of Wheeling, Va., and Steubenville, Ohio, in the latter of which dysentery prevailed as an epidemic, twice or thrice, during my residence there, I had the high gratification of seeing all recover who were treated with this remedy from the commencement of the attack, except an elderly lady who had chronic dysentery for twelve years, and who did not take the medicine as prescribed."

This letter from Dr. Dorsey was published in the *Western Lancet* for June, 1855. Dr. Dorsey said he had used the remedy for twenty years, and first learned it from Dr. F. Lemoyne, of Washington, Pa. Whether original with Dr. Lemoyne or not, is not stated, and we have no means of knowing. We are certain we never saw the remedy suggested in this disease, until we saw Dr. Dorsey's letter in the number of the *Western Lancet*, above referred to.

Dysentery is one of the plagues of the camp, and is, perhaps, the most fatal disease to which soldiers are subject. In view of this fact, and in view of the hundreds of thousands of our loyal countrymen who are now more than ever liable to this disease, anything concerning the subject, especially if pointing out a more than usually successful method of treatment, is of the first importance. Believing the treatment which Dr. Dorsey learned of Dr. Lemoyne to be more than usually successful, and believing it not to be generally known, we shall quote the particulars of that treatment: "Take of saturated solution sulph. magnesia, *seven fluid ounces,* aromatic sulphuric acid, *one fluid ounce,*—mix. The saturated solution is prepared by dissolving epsom salts in an equal quantity of water, by weight, at 60 deg. Fahrenheit. It will be ready for use in eight or ten hours. During that time it should be shaken occasionally."

The medium dose of this medicine for an adult, is one table spoonful, diluted with two or three ounces of water, every four to six hours, until it gently moves the bowels. It should be given regularly, and perseveringly, until the bowels are manifestly under its influence, which will be evinced by feculent discharges, abatement of tenesmus, and general feeling of relief. The size of the dose and times of repeating it must be varied by the practitioner's judgment, according to many circumstances of age, violence and stage of disease, &c. Sometimes it will require two table-spoonsful of the medicine every three or four hours, at others a teaspoonful every six or eight hours will be sufficient.

Accompanying each dose, when the pain and tenesmus are great, one-sixth of a grain of sulph. morph. may be given. But this remedy, also, must be varied, both in quantity and frequency of repetition, according to circumstances."

This is the manner in which we have used the epsom salts in dysentery, and the formula has more than answered our most sanguine expectations. Dr. Dorsey makes one other remark, in regard to this combination, deserving of mention, viz: "In those cases attended with a typhoid type of fever, it seems to be peculiarly beneficial."

In cases of dysentery tending to prostration, with more than usual prostration, Prof. Thayer speaks very highly of the oil of turpentine.

ANOPLASTY BY HETEROGENEOUS TRANSPLANTATION.

In the *San Francisco Medical Press* for April, Dr. A. J. Bowie reports a singular case of anoplastic operation, successfully performed upon the penis. The necessity for the operation was occasioned by a sloughing ulcer, "involving one-half of the glans, longitudinally, commencing at the meatus, and extending backward about three inches." When the slough separated, it left a deep excavation throughout its whole extent. "At this stage of the disease, the organ presented a frightful appearance, the glans being supported, in contact with the body of the penis behind, almost entirely by means of the urethra."

An attempt was made to replace lost tissue, and prevent deformity, by transplanting integument from the thigh. At the end of five days perfect union had taken place between the heterogeneous structure, and two years later "the organ presented scarcely any mark of the operation."

ASTHMA TREATED WITH OXYGEN.

In the April number of the *San Francisco Medical Press*, Prof. I. Powell has an article upon the treatment of asthma. After enumerating a number of remedies, he says: "Better still is *oxygen* carefully prepared and set free in the sick room, or inhaled from an ordinary gas-bag, diluted with one, two, or three measures of atmospheric air, as the case may seem to demand. In this manner I have relieved some of the most obstinate cases of asthma almost instantly, and the dyspnœa would not return for several hours; and when it did recur, a repetition of the inhalation was attended with the same happy results."

For the relief of a paroxysm of asthma we have found nothing to answer our purpose so promptly nor so well as the inhalation of chloroform. It is not necessary to carry the inhalation to insensibility—relief occurs far short of that.

Dr. Powell makes another practical suggestion, in regard to the use of oxygen, that requires further attention. He says: "In accidental poisoning, by burning charcoal in a closed room, a casuality that not unfrequently occurs in cold climates, I am satisfied that the inhalation of oxygen would resuscitate more promptly than any other agent."

---o---

A New Treatment of Diabetes.—A correspondent of the London *Medical Times and Gazette*, says, that Mr. Semniola, of Paris, claims to have successfully treated diabetes by faradisation of the vagus nerve. He says that the sugar in the urine is diminished, as well as the quantity of urine itself. The effects of a single application do not, it is stated, last more than from five to eleven hours, requiring its repetition. Strychnia and cold douches are given as adjuvants to the treatment.

REVIEWS AND BOOK NOTICES.

The Pathology and Treatment of Venereal Diseases; including the Results of Recent Investigations upon the Subject. By Freeman J. Bumstead, M. D., Lecturer on Venereal Diseases at the College of Physicians and Surgeons, New York; Surgeon to St. Luke's Hospital, etc. With illustrations. Philadelphia; Blanchard & Lea, 1861. pp. 680.

To practical men, works on venereal diseases have always been exceedingly unsatisfactory. The diversity of views of venereal pathology, and the equal contrariety of venereal therapeutics, left the reader with little for practical application, gained by their perusal, but yet at the same time somewhat disgusted by the malignancy with which opposing views were pressed. Every reader, then, will be glad to know that something definite is really determined on the nature and treatment, which is agreed to by those who have had the most extended opportunities of observing venereal diseases, and that we have at last a treatise which collates all known data and sets forth the subject on a really scientific basis.

When the important bearing of the discoveries in venereal pathology which have been developed within the last decennial period are considered, it will be admitted how little we had heretofore known on the subject, and how long in the darkness of empiricism we had been blundering in the treatment. The reasoning which formed much of the superstructure of syphilography had been founded in error.

The most startling recent proposition which practical men have been obliged to admit, has been the duality of chancrous virus — one kind infecting, producing hard chancre; the other non-infecting, producing soft chancre or chancoid. Recent observations have also determined the innocuousness of the secretion of the infecting chancre when applied to the individual himself, or even to any individual affected with the syphilitic diathesis. The admission, after proof by numerous experiments and frequent observation in practice, that the secondary manifestations of syphilis can be directly communicated to a healthy individual, is the result of the labors of the last few years, yet in opposition to the previous teaching of the highest authorities. That the disease when communicated from secondary lesions necessarily appears first as a chancre, just as when infected by a primary chancre, has also been but recently admitted. Recent times, too, have proven the invariable regularity of the incubation period of the true infecting chancre, as well as the invariable appearance of the secondary symptoms after primary inoculation of true syphilis, and also the total inefficiency of the so-called abortive treatment. The remarkable phenomena connected with the late experiments in the new practice of syphilization, have added much to the interest of the subject.

Thus it will be seen what a revolution syphilography has undergone, and it will be admitted how important has a renewed attention to the subject by practitioners become.

Probably every practitioner has observed among his venereal patients, how uncertain and irregular were the subsequent manifestations of the disease. One patient would have an ulcer on his penis followed by bubo in his groin, and all heal without further trouble; while another patient with venereal sore and bubo would suffer from the most terrible consequences of constitutional infection.

This has heretofore been attempted to be explained by constitutional idiosyncrasies of individuals. Hunter, who had noticed these irregular phenomena, advocated this doctrine. Abernethy seems to have tacitly admitted that chancrous virus is not uniform, for he remarks in his Essay on Venereal Diseases, that "it is from the effects on the constitution alone that we can judge whether they are syphilitic or not." Carmichael seems to have been the first to assert the plurality of chancrous poisons. But to Ricord and his pupils, particularly to M. Bassereau. is due the credit of the thorough proof of the fact. It is related by M. de Meric that Ricord many years ago asserted to him that "some day distinct origins will be found for the infecting aud non-infecting chancres" Ricord also recorded, in 1851, his observation that in the experiments in syphilization, the inoculation of soft chancres always produced soft chancres, and that in a single instance in which pus from a hard chancre had been employed, a hard chancre was the result; and remarked, that if these results were constantly obtained, we should be forced to conclude that there are differences in syphilis which do not depend alone upon the condition of the individual upon whom the cause acts, but upon differences in the cause itself,"

The following propositions, stated by Dr. Bumstead, give in brief what is now known in regard to chancrous inoculation:

1. Among persons free from previous syphilitic taint, each of the two species of chancre is transmitted in its kind; the simple chancre as a simple chancre, limited in its action to the neighborhood of its site; the infecting chancre as an infecting chancre, followed by constitutional manifestations.

2. A primary sore with a soft base, and unaccompanied by induration of the neighboring lymphatic ganglia, in a subject already infected with syphilis, will, when communicated to a person free from syphilitic taint, give rise to a hard or soft chancre, according to the nature of the virus which occasioned the first mentioned ulcer.

3. The virus of the non-infecting chancre is a poison distinct from that of the infecting chancre.

4. Phagedenic ulceration of a chancre does not depend upon a specific difference in the virus.

We have said this much on what is the most important subject treated of in the book, with the object of showing to practitioners, who almost all meet with venereal cases, the propriety of acquiring a knowledge of modern syphilitic pathology, and the rationale of the therapeutics which has been deduced.

The volume is, as it professes to be, a full and comprehensive treatise on venereal diseases, and a plain and practical guide to their treatment. The mechanical execution of the work is in the invariably elegant and substantial style of the leading medical book publishers of Philadelphia.

On the Sounds Caused by the Circulation of the Blood: being a Thesis read in the University of Dublin, for the Degree of M.D., at the winter Commencement, 1860. By Arthur Leared, B.A., M.D., Dublin, and *ad eundem oxon;* M. R. C. P.; London; M. R. I. A.; Physician to the Great Northern Hospital and to the Royal Infirmary for Diseases of the Chest, Lecturer on the Practice of Medicine, &c. John Churchill, London. 1861. Pamphlet, pp. 22.

In the January number of this journal, we reviewed a work by the same author, "On the Causes and Treatment of Imperfect Digestion," and expressed our appreciation of his labors in preparing a most useful and practical work; he has, in the meanwhile, not remained idle nor content with his title of "M. R. I. A., but has claimed and obtained the degree of "M.D." from that ancient and honorable school of medicine, the University of Dublin. The Thesis, then and there defended, is well worthy of publication, as it contains original experiments upon an interesting subject, viz: "on the sounds caused by the circulation of the blood;" and, although we cannot agree with him in his conclusions, as we believe, from experiment and observation, that the sounds of the heart depend upon the action of the valves, still we honor him for the industry and talent displayed in his work and experiments. He commences his subject by stating that it is a matter "not merely of interest, but of great importance to determine the causes of the sounds produced by the circulation of the blood. But, while the labor bestowed on it has been proportionably great, the want of general principles is amply proved by the very contradictory resuls. Even in the explanation of the different sounds by the same authorities, there is much discrepancy. The explanation about to be given "he considers consonant with general laws, and is certainly more comprehensive than any other that has been proposed."

He considers that two essential circumstances relative to the formation of sound, have been overlooked by all investigators—the effect of pressure on the blood in the heart and vessels, and the effect of the consistency of the blood.

The first thing to be established was, that rapid movements of fluid produce sound, independently of any action, as friction or vibration, upon the vessel in which the fluid is contained. This he proves by experiment: the nature of the apparatus and position of the stethescope could only be understood by examination of the wood-cut which is given in his work. He first employed water, and, in order to test the effect of viscidity, he filled the apparatus with glycerine.

The following two important principles (he considers) were established by these experiments: first, that sounds may be formed by the motions of fluids only; second, that the quality of a sound thus formed is materially influenced by the nature of the fluid.

Our limited space will not permit us to give his remarks and experiments in extenso. We will, therefore, conclude this brief notice with his conclusions, based upon his investigations.

"If the motion of the blood through the heart and arteries were equable, no sounds whatever would be produced in a state of health. But the blood is, by the action of the heart, thrown into impetuous and interrupted motions, and these give rise to normal sounds, known as the first and second sounds of the heart: both are formed in the outlets of the two great vessels,* and the mechanism of both is essentially the same.

"The *first sound* coincides with ventricular systole, and is caused as follows: Blood having been forcibly driven from the ventricles into the aorta and pulmonary artery, comes into forcible contact with blood in these vessels, which, supported by the semilunar valves, had attained a state of momentary repose.† The impact between the fluid in motion and that in a state of rest gives rise to the sound.

"Four conditions are necessary for the production of the perfect first sound:

"1. Sufficient viscidity of the blood.

"2. Sufficient force in the circulation.

"3. Sufficient pressure upon the blood.

"4. The absence of obstruction at the outlets of the heart.

"The *second sound* occurs during diastole, and in its mechanism closely resembles the first. The blood having been driven with much force into the aorta and pulmonary artery, a portion of it recoils, but is checked in its rapid descent towards the heart by the semilunar valves.

* On this point, the assertion of so competent an authority as Cruveilhier is worth quoting. In his examination of the remarkable case of an infant born with the heart exposed, he found that the maximum intensity of both sounds was at the same place—the base; and he observes, "hence it is at the base of the organ we are to look for the cause of these sounds."—*Cruveilhier, Gaz. Medicale de Paris,* 1841.

† I shall afterwards show that there can be little doubt that a secondary propulsion of blood occurs from the elastic contraction of the arteries constituting their systole. But this does not affect the general truth of the above, since the blood resting immediately upon the valves must remain almost, if not absolutely, at rest.

The sound is caused by the concussion thus induced, the force of which is, however, by no means sustained by the valves alone, for they are thoroughly supported by the ventricles and their contents.

"This is obvious, since there can be no approach to a vacuum in the heart. The valves are to be regarded as separating media, which do not themselves sustain the force of the descending blood."

A valve thus supported is known in the arts as an "equilibrium valve." The most fatal objection to our author's reasoning is the experiment of Valentine and others, which was that, when the semilunar valves were held back by curved needles, no second sound was heard.† L. T.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, DECEMBER 7, 1861.

FEES AND FEE BILLS.

It is believed that those who in remote ages, practised the healing art gave their services without reward. Whether this apparent liberalty was owing to a low appreciation of the real value of such services, or to a difficulty of setting a price as an equivalent to the benefit rendered, we know not. Perhaps the fact that the priests were the first healers influenced the gratuitous character of the services. Or it may have been because the healing art was once looked on as an innate gift, a sort of charming power, which as it was lost to its possessor on demanding fee, the healers were obliged to be content with what the generosity of their patients awarded.

In times more modern, physicians have continued the same course. Itinerant surgeons, as the lithotomist Frére Jacques, in the seventeenth century, who left the amount of his fee to be determined by the patient, but refused anything but a very small amount. How general was the practice of refusing good fees we know not, but it was never universal. Mayerne, the physician of James I. of England, and Henry IV. of France, and other monarchs, once, it is related, visited professionally a friend who, expecting to have his fee refused, thought that he would make a show of generosity and deposited a large amount before the physician. Mayerne grasped the gold, and to the expressed dismay of the patient, pocketed it. "Sir," said Mayerne, "I made my will this morning, and if it should appear that I refused a fee, I might be deemed *non compos mentis*." Perhaps Mayerne's test of mental soundness in a physician, would be acceptable with practitioners at the present time.

The earliest legal enactments determining the fees of physicians in England made them very low. An old Welch law fixed the compensation for dressing a wound to be the right to demand as payment merely the blood-stained garments of the patient. The salary of Wye, the physician of Edward III. of England, was about twelve-pence a day.

The good practice of feeing a physician at the time of his visit, seems to have been in olden times appreciated, and the characteristic forgetfulness and ingratitude of patients in regard to medical services was good warrant for it. Patients feel liberal at the time of being relieved from suffering, but soon forget their obligations, An old rhyme says that:

> "When the devil was sick, the devil a saint would be,
> But when the devil got well, the devil a saint was he."

From which it may be inferred that his satanship should be made to pay for medical services at the time when rendered. The same ingratitude is thus quaintly rhymed:

> "God and the doctor men alike adore,
> Just at the point of death, and not before.
> The danger past, they're both alike requited,
> God is forgotten, and the doctor slighted."

The policy of getting the fee at the time when services are most appreciated, is illustrated in the following:

> "Three faces wears the doctor when first sought,
> An angel's—and a god's, the cure half wrought:
> But when that cure complete he seeks his fee,
> The devil looks less terrible than he."

The rule in China with the doctors is "no cure, no pay;" but it is said that the Emperor's physicians are paid while the monarch is in health, and receive nothing during his illness, making it their policy to keep him in health, and to quickly restore him when sick.

The guinea fee, still demanded by the higher class of physicians in England, was customary, perhaps, nearly two hundred years ago. An au-

† See Kirke's Manual of Physiology, Amer. ed., 1857, p. 93; also Dalton's Human Physiology, second ed.

thority, dated in 1700, says that "to a graduate in physic his due is about ten shillings, though he commonly expects or demands twenty." It is related of John Hunter that he once, when interrupted in his investigations by being obliged to visit a patient, threw down his instruments in a bad humor, exclaiming, "Now, I must go and earn a damned guinea."

The fees of physicians have evidently increased in amount in modern times. The greatest professional income of any single practitioner was probably that of Sir Astley Cooper, which for a time exceeded one hundred thousand dollars a year. He was once paid by a West India gentleman about five thousand dollars for an operation. For attendance at the same time, the consulting physicians, Drs. Lettsom and Nelson, each received about fifteen hundred dollars. The Empress Catharine, of Russia, paid, in 1768, as a fee to her physician for inoculating herself and son about sixty thousand dollars, an annual pension of two thousand dollars, and created him a Baron. The Emperor Joseph, of Austria, on his deathbed created his physician a Baron, and bequeathed him an annuity for life, amounting to ten thousand dollars.

In this country, the average amount of income received by the profession is very moderate, but there are in all large American cities those who receive yearly a very large sum. As an instance, for which we have the authority of the *Pacific Medical Journal*, the annual professional income of Dr. Toland, of San Francisco, is thirty-five thousand dollars. The largest single fees which we have recently known to be paid American surgeons were one thousand dollars for the operation of lithotomy, the same amount for an operation for vesico-vaginal fistula, and five hundred dollars for an operation for cataract.

Attempts have been made in different communities to fix a definite rate for compensation for medical services, but the impossibility of determining a market value for scientific attention to a patient, with its consequent anxiety and responsibility, has made the fee-bills very dissimilar and of little importance as authorities. In litigation, the attested evidence of physicians in regard to the prevalent custom of charging seems to be received irrespective of any fee-bills. Perhaps the disinclination of the scientific practitioner to have the value of the performance of his duty estimated by money, has prevented much attention to the subject of fee-bills. However needful to him be the well-earned fee, he cannot feel it to be the immediate object of his devotion to the relief of human suffering, yet collaterally, it comes in as indeed an essential.

We believe that for the material interests of the profession, not enough attention has been given to schedules of charges for services. A fee-bill for the whole country, suited to its varied social conditions, would seem impracticable, but perhaps the American Medical Association might construct, with wide margins, an approximative standard.

In spite of fee-bills, practitioners will set their own pecuniary appreciation on their services. Like literary labor, medical attendance is worth in the market what it will bring. Grubb-street prices may overpay one class of literary scribblers, and the medical tyro, whose fate is to "learn to labor and to wait," may be recompensed by the experience gained in laboring and waiting.

A correspondent of the *Boston Medical Journal* expresses surprise that, although fee-bills have been adopted in various localities among us, and are occasionally referred to, yet they have never appeared in medical periodicals, and are consequently unknown to and inaccessible to the mass of the profession. The editors of the journal alluded to have suggested the propriety of publishing to the profession the fee-bills as they exist in the principal cities, and as their publication may be to many of our readers a matter of interest, and perhaps utility, we append in full the only table of charges which has been adopted by any medical organization in this city—that of the College of Physicians. It is probable that, by most practitioners in Philadelphia, it will be seen for the first time, as the charges for medical service have not been guided by any fee-bill. Following it, is added, for the purpose of comparison, a portion of the fee-bill of the Boston Medical Association:

FEE BILL OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.

For a single visit or advice, in a case in which no further visits are required	$5 to $10

This is not intended to apply to those cases in which the physician is considered the regular medical attendant of the individual or family.

For each visit, in a case in which the physician is in regular attendance, or for advice at his office	1 to 2
Every necessary visit on the same day to be charged, whatever may be their number, at the same rate.	
When detained, for each hour	3
For a visit at a time appointed by the patient or his friends, during the day time	2 to 5
For a written opinion or advice to a patient	5 to 20
For a visit at night, after ordinary bed time	5 to 10
For a first visit as consulting physician	5
For each subsequent visit as consulting physician, in the same case	2
For a visit as consulting physician during the night,	10

In visits to distant patients, one dollar to be charged for every mile beyond two from the residence of the physician, in addition to the ordinary charge, and $2 additional for crossing the river Delaware.

An extra charge may be discretionally made for traveling at night, or on account of the badness of the roads, or the inclemency of the weather.

For an opinion involving a question of law	10 to 50
For a post-mortem examination, in a case of legal investigation	25 to 50
For a post-mortem examination made at the request of the family or relatives of a deceased person	5 to 15
For a certificate of the state of health of an individual	5
For vaccination	5
For re-vaccination	2 to 5
For a case of midwifery	10 to 40
For the application of the forceps	10
For the operation of turning	10 to 20
For the operation of embryulcia	20

For any indisposition of the mother or child, after the tenth day from confinement, the charge for attendance as in ordinary cases requiring medical treatment. But when any *serious* ailment occurs in either mother or child within ten days, a charge is to be made for each visit as in other cases of disease.

For reducing fractures, and the first dressing	10 to 20
For reducing recent luxations	10 to 30
For reducing old luxations	50
For removal of stone from the bladder	100 to 300
For amputation of a leg or arm	50
For amputation at the shoulder or hip-joint	100 to 200
For amputation of a finger or toe	10
For the extirpation of large tumors	50 to 100
For the extirpation of other tumors	10 to 50
For trepanning	50 to 100
For the operation for cataract	75 to 150
For other operations on the eye and its appendages,	10 to 50
For the operation for aneurism, subclavian, carotid, femoral	100 to 200
For the operation for strangulated hernia	50 to 100
For the operation for hare lip	20 to 50
For the operation for fistula in ano	20 to 50
For fistula in perineo	50 to 100
For the operation for hæmorrhoids	20 to 50
For the palliative operation for hydrocele	5 to 10
For the operation for the radical cure of hydrocele,	20 to 30
For the operation for vesico-vaginal, or recto vaginal fistula	50 to 100
For the operation for phymosis and paraphymosis,	5 to 20
For the introduction of the catheter, in ordinary cases	1 to 2
For the introduction of the catheter, in cases of obstruction	10 to 20
Fro division of stricture of the uretha	10 to 50
For the operation for artificial joint	20 to 100
For the operation for tracheotomy	20 to 50
For the operation for imperforate anus, vagina, &c.,	10 to 30
For the Cæsarian operation	100
For the reduction of hernia by taxis	10 to 50
For extirpation of the tonsils	10 to 20
For the introduction of the stomach pump, in cases of poisoning	10 to 30
For the removal of foreign substances lodged in the pharynx or œsophagus	10 to 50
For the reduction of prolapsus ani	5 to 10
For examination per anum or vaginam	5 to 15
For the introduction of a pessary	5
For the introduction of a seton, or forming an issue	5
For tapping for ascites	10 to 20

In all surgical cases, the charge for subsequent attendance to be in proportion to the time occupied and the trouble incurred.

It is recommended that in all cases of gonorrhœa and syphilis, a retaining fee of from $10 to $25 be required in advance, the subsequent charge being graduated by the amount of the after attendance in each case.

Physicians should present their account at least annually, or as much oftener as they may deem proper.

FEE BILL OF BOSTON MEDICAL SOCIETY.

In the present table there is named for each service the limits within which the fee shall be placed, though not designing to prohibit a higher charge where the time devoted, or the importance of the service rendered, should call for it; nor, on the other hand, to forbid a deduction to those in limited circumstances, in proportion to the exigencies of the case.

From the Fee table we take the following items:

For a visit	$1 to $2
For a visit and first consultation	5
For a visit and each subsequent do., if the attendance be continuous	3
For a visit out of town,* for every mile from the centre of Boston	1 to 2
For a visit out of town in consultation, the fee as above for a visit and consultation, with the addition for every mile except the first, of	1 to 2
In like manner, for every other service, when out of town, the fee for the service shall first be charged, and for every mile except the first	1 to 2
For rising in the night† and visit	5 to 10
For rising in the night and visit in consultation	10
For advice at the physician's house, according to the importance of the case and the time occupied	1 to 10
For a letter of advice	5 to 10
For an opinion involving a question of law, in which a physician may be subpœnaed	10 to 50
For a post-mortem examination, in a case of legal investigation	20 to 50
For do. made at the request of the family or relations of the deceased	5 to 25
For a case of midwifery in the daytime	10 to 20
For do. if any part of the attendance be in the night,	15 to 25
For capital operations, such as amputations of large limbs, lithotomy, lithotrity, trepanning, extirpation of large tumors, operation for cataract, &c.	50 to 200
For reducing luxations or fractures of small bones, for stitching recent wounds, opening large abscesses, and similar operations	5 to 10
For vaccine inoculation	2 to 6
For re-vaccination	1 to 3

It is recommended that in all cases of gonorrhœa and Syphilis a retaining fee of from $5 to $10 be required in advance; the subsequent charges to be made as in ordinary cases of attendance or advice.

---o---

Canadian Act for the General Adoption of Vaccination.—An act has been adopted in Canada, which provides that the parents of every child shall have it vaccinated within three months after its birth. Vaccine physicians are to be appointed for each ward in cities, and convenient places fixed for the performance of the vaccination. The fee to the physicians, for each successful vaccination of poor persons, is to be twenty-five cents.

---

* If by railroad, from 50 cents to $1 per mile, according to the time saved to the practitioner.

† The night, in this table, is considered as beginning at 10 o'clock P. M. and ending at 6 o'clock A. M., or at sunrise, when that is later than 6 o'clock A. M.

EDITORIAL NOTES AND COMMENTS.

The Death of Assistant-Surgeon Alexander.—From an official letter from the Surgeon of the First Pennsylvania Cavalry Regiment, directed to the Surgeon-General of the State of Pennsylvania, we extract an interesting account of the circumstances attending the wounding and subsequent death of Dr. Alexander. Dr. Alexander was a resident of Milroy, Mifflin county, Pennsylvania, where he was much respected and endeared to many friends. He had been but recently married.

The want of proper ambulances, alluded to in the letter, is unaccountable, as each Pennsylvania Reserve Regiment was furnished by the Surgeon-General of the State, with one four-wheeled, and two two-wheeled vehicles for the purpose.

Camp Pierpont, Va., Nov. 30, 1861.

"The skirmish in which Dr. Alexander was wounded, occurred about three miles this side of Dranesville, at about 8 A. M., on the 27th inst. The rebels were secreted in a thicket of pines, awaiting the approach of our regiment. Dr. Alexander and an orderly were about half a mile ahead of the column, and consequently received the first fire. The doctor was struck by a rifle shot in the left illiac region, the ball penetrating the abdominal walls. His clothing was pierced in several places, and his horse received several balls.

As the column approached, as yet unaware of the danger, the colonel and myself being at the head, received the first volley. At least twenty or thirty shots were fired at us, and although the enemy were within forty paces, neither of us were wounded. Our clothing was pierced in several places, and our horses shot; the colonel's killed. Our men quickly and fearlessly dashed into the woods, and in a few minutes killed three, wounded three, and drove the remaining forty or fifty away.

We brought our wounded with us. By the use of stimulants Dr. Alexander was enabled to ride on his horse to where we met the ambulances sent out to us. The doctor suffered extremely for forty-eight hours, when he was relieved by death from internal hemorrhage.

We are indebted to the Brigade-Surgeon for kindness and very efficient aid.

You ask if we need anything to minister to the comfort of the wounded; I believe not at present. Thanks to your care we were well supplied with instruments, etc., but we have not yet received the ambulances you intended us to have. We have two old two-wheeled ambulances, which we got from the United States authorities, and if a little skirmish will fill them, we shall certainly need more. I would like to have a four-wheeled one, they are much easier. Dr. Alexander's greatest suffering was from the rough ride in the small ambulances.

I hope that you can send me an efficient Assistant-Surgeon. The cavalry service requires good assistants more than the infantry, from the fact that the regiment is so frequently divided."

The Illness of Prof. Von Graefe.—This great oculist was taken suddenly ill at Baden Baden, while on the point of commencing his bridal tour, and at last accounts was very low. The *Allgemeine Zeitung* says, that inquiries respecting his condition come by every mail from all parts of Europe, all uniting in the earnest wish that his life may be spared. He is the son of a surgeon, only 33 years of age, and is already far ahead of the oldest and most experienced of his art. He has already had over 100,000 cases under treatment, besides doing an incredible amount of other work. He publishes a periodical of the highest scientific character and authority in all matters pertaining to ophthalmology. His investigations of the origin and effects of the *cisticercus cellulosus* are entirely original. He is believed to have been the first to discover these parasites within the eye, and is the first, if not the only one, who has actually cut open the eyeball, drawn out the intruders, and saved the eye. He is also the inventor of a new instrument for illuminating the whole interior of the eye, by which the inner surfaces can be as perfectly examined as the outer. The theory of his new treatment is not yet fully developed, and his death at this time would be an almost irreparable loss to the scientific world.

The Philadelphia Hospital.—This is already one of the largest institutions of the kind in the country, but its capacity is too small for the proper accommodation of all the invalids who seek admission within its walls. An enlargement is greatly needed, and an appropriation of $20,000 for the purpose of adding a new building in part, is asked from the Councils. The number of inmates has increased during the year thus far about ten per cent. over last, but the accommodations are not increased in

proportion. There are 103 beds in the men's surgical wards, while the number of patients at one time during last winter was 142. In the men's medical and venereal ward, there are 292 beds; in the women's wards, there are 219 beds; the greatest number of patients in the former at one time last winter was 301, in the latter 215. It is proposed, therefore, to remove the children's asylum to a new building which will increase the hospital room to the extent of 180 to 200 beds.

In the Insane Department, the removal of the old amphitheatre, and the erection of a new clinic room in closer proximity to the hospital, gives a much needed addition to the accommodations of that department, and promotes a better classification of the patiedts.

As a place for the study of disease in its worst and most aggravated and uncommon forms, the student of medicine will hardly find a place equal to the Philadelphia Hospital Clinic.

Widows and Orphans of Medical Men.—For nearly twenty years, there has been in existence in the city of New York an Association for the Relief of the Widows and Orphans of Medical Men. During that time, it has accumulated quite a large fund, amounting in September last to $31,500, which is invested at 7 per cent. interest. The society numbers 109 members, of whom 71 are for life by the payment of $100 at one time, and 33 are annual subscribers, paying $10 per annum. Three families of its deceased members now receive aid from its funds. The receipts for the last year were $2,606 87, the expenditures $341.53. At its annual meeting held on Wednesday of last week, Dr. James Anderson was elected *President;* Drs. G. P. Camman, H. D. Bulkley, and Wm. Detmold, *Vice-Presidents;* Dr. J. W. G. Clements, *Secretary;* Dr. Edward L. Beadle, *Treasurer;* Jacob Hursen, Isaac E. Taylor, John R. Van Kluck, S. P. White, James R. Wood, J. O. Stone, and S. Conant Foster, *Managers.* The custom of the society has been to have an annual dinner, but this festivity was omitted on account of the state of the country. The roll of members includes all the more illustrious names of the profession. The object of the society is truly a commendable one.

The Sanitary Commission and the Medical Bureau.—The discussion now in progress in the New York papers between the friends of these two distinct organizations has developed several facts which are worthy to be recorded:

1. That the "Medical Bureau" is the Government organization for the Sanitary Department of the Army. At the head of this bureau stands Dr. Clement A. Finley as Surgeon-General.

2. That the Sanitary Commission is a voluntary organization, recognized by the Government as an important aid in carrying its sanitary regulations into effect, but having no authority other than the character and position of its members give. At the head of this organization stands the Rev. Dr. Bellows, a civilian.

3. That there is a regular Medical Purveyor appointed by the Government, under its Medical Bureau, whose business it is to attend solely to the distribution of supplies to the sick troops. Connected with the office, are a large number of employees, and the business is systematically conducted.

4. That the Surgeon-General has no power to appoint a "Board" to inquire into the qualifications of surgeons of Volunteer regiments, that being confided to a Medical Board in the various States. Complaints against these surgeons can, therefore, reach him effectually only through the Colonel of a regiment or General of a brigade.

5. A Medical Board, composed of the highest officers in service, is in daily session at Washington, to examine and pass upon such applicants as come before them for the post of surgeon or assistant-surgeon in the *regular* army.

6. That every military hospital is conducted upon a regular ystem ; has a fund from which it supplies itself with delicacies, (greatly increased in number by the late act of Congress,) and even luxuries for the sick; that every needful comfort for the sick is supplied by Government, and that if any hospital lacks such, it is the fault of the head surgeon.

Government Hospital for the Insane.—From the report of the Secretary of the Interior, made to the Congress now in session, it appears that the appropriations made by Congress for the erection of buildings and improvement of the grounds of this institution have been expended with judgment and economy. The buildings are spacious, well ventilated and warmed, arranged with every convenience necessary for the health and comfort of patients, and in every respect well adapted to the purposes for

which they are designed. The grounds are in a fine state of improvement. Since the institution was opened in 1855, 439 persons have been treated. The number of patients in the house on the 30th of June, 1861, was 180, classified as follows :—From the army, 25; the navy, 11; the revenue-cutter service, 1; civil life, males, 72; females, 72. During the past year, 19 died, 63 were discharged, 48 of whom were completely recovered. The large per cent. of recoveries furnishes complete evidence of skill and care in treatment. The war has largely increased the burdens and responsibilities of the institution, and a portion of the building has been appropriated for the accommodation of the sick and wounded from the Potomac and Chesapeake fleets. About fifty of this class of persons have been admitted. The institution is under the superintendence of Dr. C. H. Nichols, an able and faithful officer.

Commencement at the Pittsfield (Mass.) Medical Institution.—The annual Commencement of this institution took place, on Tuesday, the 19th ult. The graduating class numbered fifteen, and passed the ordeal of their examination with great credit to themselves and their teachers. They were addressed by Professor Chadbourne, of Williams College, in a very able manner. The exercises of the day were concluded with a dinner at the Berkshire Hotel, of which the Faculty, the trustees, the graduates, the members of the Berkshire Medical Society, and a large number of invited guests partook. A most agreeable and satisfactory festival, we have no doubt. The new Medical College is said to be admirably located and complete in its exterior design and internal arrangements. It was built at a cost of $30,000.

The Berkshire Medical Journal, which has been published at Pittsfield, Mass., expired with the completion of its first volume. We chronicle its death with regret. It was conducted wth spirit and ability, and its columns gave us pleasure and profit. In his "last words," the editor says: "Our prospects might, at this time, be different, and we might now, perhaps, be girding ourselves anew to the work of journalizing, were our national affairs otherwise than they are. But this alone is reason enough for our duty to come to an end."

—o—

Tobacco.—The average amount of tobacco consumed in the whole world, averages nine ounces annually for each individual.

Correspondence.

BOSTON CORRESPONDENCE.

Society for Medical Improvement—Dr. Cotting's Case of Curvature of Spine—"What Is It?"—Inspection of Hospitals—Meeting of Sanitary Committee.

Boston, November 29th, 1861.

I have but little to note this week. It has been an uncomfortable wintry week; snowing, raining, and blowing by turns. But winter, as yet, has not touched us here, though the hills back in the northern part of New England are clad in their coats of ermine.

The Society for Medical Improvement met, as usual, on Monday evening last. Dr. Cotting, of Roxbury, reported a case, which is to be published in the Journal, and which presented many peculiar features. The patient was a young child, who gradually became so much bent backwards that she rested on the nates and the upper part of the forehead, the head being thrown back and closely applied to the scapula spine. As the case progressed, the stomach became very sensitive, rejecting everything, but the mind remained clear, and there was some power of locomotion. After her death, an autopsy revealed extensive disorganization of the bone about the ear, with a purulent collection in the vicinity. The difference between the position in this patient, and one who was very much bent back from opisthotonos, was shown to be very marked. In the former the spine alone was curved and arched, while in the latter the curve took in the whole body, and the patient rested on the heels and the vertex.

We have now here on exhibition the famous or infamous (just as you please) "What is it?" from Barnum's Museum. A measurement of the head of this creature was taken by one of the members of the Society, and, given in comparison with the measurement of an idiotic cranium, known as the Idiot of Cork. By this the head of the What is it? is much smaller in every respect, showing it to be one of the most remarkable instances of idiocy as yet known. In refutation of the statement of the showman that this creature was young, and had been caught but about fifteen months, one of the gentlemen present remarked that he saw this same exhibition in London nine years ago, and that there was the same evidences of age as were now noticed. It evidently belongs to the same race with the Aztec children, who have long since been decided to be only idiot dwarfs.

A very fine specimen of inflamed ovarian cyst was shown, which, during life, had all the symptoms of simple abscess of some of the internal integuments.

One of our most promising young physicians,

Dr. Robert Ware, has recently been appointed Inspector of Hospitals, under the authority of the Sanitary Commission. Dr. Ware possesses eminent qualifications for this work, and will no doubt serve his country faithfully and with profit.

A meeting of the Sanitary Committee was held here a few days ago, at which a general statement of the objects of the Commission was made, and an earnest appeal for further aid from the public put forth. There can be no doubt that great good may be done by this organization, in equalizing the distribution of the hospital supplies which are so readily contributed on all sides. TRIMOUNT.

NEW YORK CORRESPONDENCE.

Pallida mors æquo pulsat pede pauperum tabernas Regumque turres.—HORACE.

Richard S. Kissam, M. D., an eminent physician and surgeon in this city, died last Thanksgiving day, of pneumonia, in the fifty-fourth year of his age. Those who are the doctor's immediate relatives are sufficiently aware of his conscientious practice; his untiring devotion to the calls of science; the high tone of every action, and his indefatigable perseverance in the profession of his choice. Few men, of modern times, have exhibited throughout their lives, such truthful, firm, and loyal friendship, as the doctor to those whom he selected as companions in his journey and as allies in his labors. Dr. Kissam's never-failing attendance on Dr. Francis, during his last illness of two long months, is sufficient to stamp his disinterestedness as sterling. "In 1838, Dr. Kissam performed the operation of transplantation of the cornea, in the presence of Drs. J. B. Kissam, Pratt, Roberts, and Paul. The patient was an Irishman, thirty-five years of age, one of whose eyes was totally lost. The other suffered from staphyloma with adhering iris. The cornea, transplanted, was taken from a pig six months old. His sight improved immediately after the operation, and continued so for two weeks; but, the humors being involved in disease, it was not perfect. The cornea remained transparent for a fortnight, when it lost its pellucidness, and in a month was absorbed. For full particulars, see "*New York Journal of Medicine*," for March, 1844, and Walton's Operative Ophthalmic Surgery, page 381.*

This was no ordinary operation. It indicated coolness, knowledge, and originality.

A member of the Academy of Medicine from its earliest inception, he ever maintained its laws and practiced its ethics. Calm and dignified he lived; prepared, and with a wonderful composure did he yield to the higher calls of Providential intervention. Interesting and affecting is it, that his son, Corporal Astor Kissam, aged but fifteen years, was on the war path, fighting for his country; while his father was still in death, below, his voice no longer heard."

The proper resolutions were adopted by the several societies of wbich he was a member, and the New York Historical will commemorate the event by appropriate remarks on some future occasion. Our army now numbers some six hundred and sixty thousand patriots, in arms and ready—sixty thousand of whom are confined within the hospitals for various diseases.

Prof. Chapman, of Brooklyn, is busily engaged in making interesting experiments on divers animals, relative to toxicological effects and antidotes in general. The zealous doctor spares not in his search the domesticated cat, nor the playful wag of a "black and tan." For him even the cooing dove must be a sacrifice, and the modest mouse no longer nibbles cake with rich impunity. Go on doctor! May success and vast discoveries banish from your learned and original cerebral hemispheres the nocturnal visits of reproving ghosts, emanating from the dead remains of the inferior animals!

The table on which Magendie discovered "liver sugar," experimented on purchased pets, is now in the possession of Dr. Flint, at Bellevue Hospital College. This Institution is rapidly gaining ground. The present number of students is over one hundred. May the efforts of its well versed laborers prove, as well they may, sufficient to fill every bench, and bring in well fed dividends.

Dr. Sims, of the Women's Hospital, is expected to return in every steamer. During his absence Dr. Emmet has succeeded in many difficult operations, and proved himself equal to the undertaking. His colored illustrations of these local derangements evince talent, while they elucidate the principal with accuracy.

It is to be hoped that a large volume of the more intricate cases will be published ere long, called "Surgery *Sim*plified."

GOURMET.

Independence, Iowa, Nov. 29, 1861.

DEAR SIRS:—In the number of the MEDICAL AND SURGICAL REPORTER, for the 9th of November, in a case of scarlatina, recorded in the *Medical Times and Gazette*, you say "The idea of the contagion of scarlatina being conveyed by mail, and *immediately* affecting the recipient of the letter, is prima facie, absurd and preposterous." Now, from the history of the case, I do not understand that the effect was immediate, but an interval of twenty-four hours elapsed from the receipt of the letter to the sickening of the patient. Although a period of four days is the most usual for the development of the disease, yet many physicians, I suppose, have

*Hospital Hygiene by V. M. Francis, M. D., page 27.

seen the incubations accomplished in one day, from exposure. From my experience of the phenomena of scarlatina in a practice extending back twenty years, I am prepared to give full credence to the circumstances set forth in the *Times* and *Gazette*.

[The point with us was not against the *facts* as narrated, but in regard to the medium of communicating the so-called "contagion."]

Almost all medical writers represent the poison of scarlatina as being one of the most persistent, penetrating, and subtle contagions, and next to variola in the certainty of affecting those exposed to its action. It may be communicated, not only by direct exposure to one laboring under the disease, but, also, by fomites, and through the medium of a second person, who may transmit the poison by his clothing or person. To illustrate, I will cite a few examples:

A child died of scarlatina; was placed in its coffin, and conveyed thirty miles to the town, where its relatives resided, which was previously entirely free from the disease. The children of the neighborhood, to the number of a dozen, assembled at the house to take a last view of the face of their former little friend. The coffin was opened in a bedroom, and the children allowed to look in. Of this number, more than one-half sickened with the disease, from whom it spread over the town. A lady had been in another quarter of the city nursing the child of a friend which died of scarlatina, coming home she communicated the poison from her clothes or person to a grandson, who died in a short time. An only child, a daughter, aged nine years, was prevented, by her parents, from visiting the last named, her little cousin, while sick with the disease, until after his death and burial; when, on the day after the funeral, she was permitted to visit the house for a very few minutes only, and in about four days she sickened and had a narrow escape with life.

A physician being in attendance upon a family of three children, affected with scarlatina anginosa, was called into a neighborhood six miles distant from any known case of the disease to attend a young woman in her first labor. He, without a change of clothes, waited upon her during a safe and easy delivery. Four days after, she was attacked with scarlatina, and likewise the child soon after. I need hardly add, the woman in a few days died—for such cases are almost uniformly fatal—but the child recovered. From such experience I do not hesitate to assert, that physicians attending on parturients without a proper change of raiment and ablution, after visiting patients affected with a malignant type of this disease, are as morally guilty as they would be in case of variola or malignant erysipelas, and that the same cautions should be observed in the one as in the other. Now, if scarlatina may be communicated by fomites, or by the clothing of a second person, then why not by letter? I confess I can see nothing "absurd" or "preposterous" in it. And the moral to be drawn from these examples is, that we should be extremely cautious in our professional intercourse, lest we convey malignant and contagious diseases to our confiding and unsuspecting patients, our families, and our friends. John G. House, M. D.

Arsenic and Quinine Alternately in Fever.

Messrs. Editors:—The following, perhaps, will not be uninteresting to some of your numerous readers, especially in the West.

I was called to see a lady, about four weeks ago, a Mrs. S., æt. 28, mother of two children.

Physical Appearance.—Small in stature; spare habit; much emaciated, weighing about 96 pounds; countenance flushed; respiration hurried; pulse quick, and frequent headach, with a sense of tightness above the eyebrows; skin dry and husky; tongue dry, and coated in center; taste bitter; nausea; considerable gastro intestinal irritation; bowels passive. Feels much better in the forenoon, with an aggravation of all the symptoms in the afternoon.

Antecedent History.—One year ago she contracted a typhoid fever, (so called,) which confined her to bed for nine weeks. Her attending physician was one of those deciduous advocates of Samuel Hahnemann of Leipsic. Since then she has enjoyed very poor health, and has had one miscarriage. She stated she felt precisely the same symptoms the fall previous, when she lay the nine weeks, which greatly depressed her spirits, for she felt that she would never survive nine more- I was asked, "Was it typhoid fever?" I said I did not regard it as such, but as a genuine case of remittent fever. And I accordingly commenced the treatment with the following:

℞ Spt. mindereri,
Syr. pruni virgin, āā ℥iss.
Liq. pot. arsenitis, ℥ij.
Liq. morphia sulph. (Mag.) ℥i. M

℞ Sub. nit. bis.,
Sacch. alb., āā ℈ii.
Quiniæ sulph. gr. x.
Ft. chart, No. X. M

A tea-spoonful of the mixture, and one of the ten powders, was ordered every alternate two hours—except at night, when she rested well, they were to be omitted,

On the following day there was but little alteration in the symptoms. Continue the same.

Third day, a perceptible change for the better. Fourth day, more perceptible yet. Fifth day, doing first rate. Suffice it to say—seventh day, she was *convalescent*. After which a tonic, wine, nourishment, etc., etc.

I am aware that Fowler's solution was heretofore used, and highly praised, in remittent fever, but never heard of quinine being used alternately with it. Give us some information on the subject, and much oblige,

Yours, most respectfully,

Lewis Gaynor, M. D.

New Britain, Conn.

NEWS AND MISCELLANY.

Government Hospitals in Philadelphta.—The Government, we are informed. have selected the following locations in different parts of the city, for military hospitals:

The railroad depot, at the southeast corner of Broad and Cherry streets, formerly occupied by the Reading Railroad Company as a freight depot. The building is four stories in height, having a front of some hundred feet on Broad street, with an arched gateway and railroad turnout leading directly to the entrance to the wards, requiring no change of cars from Baltimore. This building will accommodate from six to eight hundred patients.

The large manufactory at the corner of Callowhill and Twenty-second streets, formerly used by Messrs. Pugh & Curry, makers of paper hangings, consisting of the entire premises, with the exception of a small part used for storing the valuable machinery. This will give accommodations for about three hundred.

The silk manufactory of Messrs Lewis & Brother, Twenty-third and Lombard streets, which will hold from two to three hundred.

The large carriage manufactory of Messrs. Dunlap & Brother, at the junction of Fifth street and Old York avenue, corner of Buttonwood street, a building some five stories in height, and which will hold in the neighborhood of four hundred.

Each of these buildings is undergoing the necessary alterations to make them convenient for hospitals, and will be ready in a few days for the accommodation of the sick and wounded. Their location is not open to the objections brought by the Board of Health against that on Water street below Arch, which, we are glad to observe, is abandoned, if it was ever determined upon.

Surgeons of the Second Naval Expedition.—Medical Director, Dr. W. H. Church, of New York. 51st Reg. N. Y. Vols., Surg., Dr. E. W. Buck, Assist. Surg., Dr. C. W. Torrey. 53d Reg. N. Y. Vols., Surg., Dr. H. J. Phillips, Assist. Surg., Dr. Dubreuil. 23d Reg. Mass. Vols., Surg., Dr. Geo. Derby; Assist. Surg., Dr. Silas E. Stone. 24th Reg. Mass. Vols., Surg., Dr. Sam. A. Green; Assist. Surg., Dr. Hall Curtis. 25th Reg. Mass. Vols., Surg., Dr. J. Marcus Rice; Assist. Surg., Dr. Theron Temple. 27th Reg. Mass. Vols., Surg. Dr. Geo. A. Otis; Assist. Surg., Dr. Samuel Camp. 8th Reg. Ct. Vols., Surg., Dr. De Witt C. Lathrop; Assist. Surg., Dr. J. V. Harrington. 10th Reg. Ct. Vols., Surg., Dr. A. T. Douglas; Assist. Surg., Dr. M. F. Newton. 55th Reg. Penn. Vols., Surg., Dr. Livergood; Assist. Surg., Dr. Noble.

The number of Federal Soldiers now on the sick list in the various camps and hospitals of the country is estimated at 60,000, or about twelve in each hundred.

Fevers at Fortress Monroe.—An army surgeon writes: The fevers here are the most refractory I have ever witnessed, resisting the best remedial agents. Quinine is wholly ineffectual in all its stages, but is still to be commended as a prophylactic and tonic substance. Emesis, the more powerful the better, I have learned to be the only reliable treatment in the initial stage of typhoid. Even if nothing else is done, this will suffice to place the disease under what we may term "control;" and without it you may as well confess yourself, at a very early point in its progress, vanquished.

Graduates at the Berkshire Medical College.—The following gentlemen received the degree of doctor of medicine at the Berkshire Medical College, at the close of the session of 1861, after examination: David De Los Bowen, John Thomas Benham, David Foss, George Washington Gale, Jr., Lucius Barstow Irish, Robert Hazard Morey, Louis Edwin Norris, Nathaniel Morton Ransom, Samuel Kenrick Rich, Myron Winslow Robinson, Frank Augustus Sabin, Joel Stevens, Charles Elliot Streeter, Augustus Van Cleef, and Nathan Hand Wright; and Robert William Gray, M. D. Bowdoin, *ad eundem.* We are too early in press for further particulars.—*Berkshire Med. Jonr.*

Small-Pox among the Soldiers.—We have been informed by the Surgeon-General that there are a few cases of small-pox at one of the camps in this State, and would again remind the profession that there is still a need of vaccine matter, which should be directed to the Surgeon-General's Office, No. 1112 Walnut street, Philadelphia.

Navy Suryeons appointed.—Since the last publication the following gentlemen have passed a successful examination before the Naval Medical Board, viz: Thomas A. Penrose, of Pa.; Samuel W. Abbott, Mass.; Edward C. Van Meulin, of N. J.; Thomas Hiland, of N. H.; Newton H. Adams, and Geo. D. Slocum, of N. Y. Since the first of August fifty-four persons have been passed by the Board.

Schuylkill County Surgeons.—This county has seven newly appointed surgeons in the army, and two in the navy. Four of the former are Brigade Surgeons under Generals McClellan, Sherman, Rosencrans, and Halleck, respectively. Their names are as follows: Dr. McKibbin, now at Port Royal; Dr. R. S. Webber, who has just returned from duty on the coast of Brazil; Dr. H. A. Silliman, who was at the Bull Run battle; Dr. H. Parry, now chief resident of the large hospital in Washington; Dr. John Carpenter, who has charge of a hospital in Western Va.; Drs. Robbins, Bland, Douglas, Bannan, and J. Burd Peale.

Buffalo Medical College.—A correspondent informs us that there are about seventy students in attendance at that College this winter.

MARRIED.

Harris—Chase—In Westminster, Nov. 12. by Rev. J W. Bemis, Newton C. Harris, M.D., of Schuylerville, N. Y., and Nancy C., daughter of Charles E. Chase, Esq., of Westminster.

Dwinelle—De Grove.—In this City, on Tuesday, December 3, by Rev. Dr. Osgood, W. H. Dwinelle, M.D., to Hester S. De Grove.

M'Kean—Slutts.—November 17th, by Rev. J. A. Brown, William M'Kean, M.D., to Miss Rachel Slutts, both of Middletown, Holmes county, Ohio.

Sloan—Johnston.—At the residence of the bride's father, on Thursday morning the 14th ult., by Rev. W. Morris Grimes, Mr. William G. Sloan, of Peoria, Ill., to Miss Ruth Anna, youngest daughter of Dr. P. B. Johnson, of McConnellsville, Ohio.

Pooley—Sampson.—In New York, on Wednesday, Dec. 4, by Rev. W. F. Watkins, Dr. J. H. Pooley, U. S. Army, to Miss Mary E. Sampson, daughter of William E. Sampson, Esq., of this city.

DIED.

Kissam—In New York, on Thursday morning, Nov. 28. of pneumonia, Richard S. Kissam, M.D., in the 53d year of his age.

Wick.—Of typhoid fever, on Thursday, the 14th November, 1861, Dr. Wm. W. Wick, of Rimersburgh, Clarion county, Pa., aged about 30 years.

Answers to Correspondents.

Dr. D. H., Pa.—We will send you the Reporter for one year, together with Hand Book of Practice, and Visiting List for 1862, for $4 paid previous to January.

Vaccine Virus.—Our supply of vaccine matter is exhausted; but the demand is increasing. A response from those who have received a supply from us, will enable us to respond to the requests of others.

Dr. J. W. B., Ill—The Reporter for one year, and Physician's Hand-Book of Practice for 1862, will be sent to your address for $3 60, paid previous to Jan. 1862. The Hand-Book contains in addition to the practical part, a Visiting List for some thirty patients, and sells at retail for $1 25 per copy. Subscribers to the Reporter get the book therefore for less than half what it will cost them if they buy it at the book stores. Or we will send you the Reporter and "Physician's Visiting List" for 25 patients, the retail price of which is 75 cents, for $3 40, paid within the same time. These terms are exceedingly liberal, and we hope will induce you not only to subscribe for the Reporter yourself, but to commend it to others. tf.

Communications Received

Connecticut—Dr. L. Gayner. *District Columbia*—Dr. A. A. Woodhull. *Delaware*—Dr. G. P. Norris. *Kentucky*—Dr. W Douglass. *Maryland.*—Dr. L. Watcher, with encl. *Massachusetts*—Drs. L. & W. H. Traver, with encl.; Dr. G. J. Arnold, Trimount; Dr. C. Cullis. *Michigan*—Dr. D. C. Addington. *New, Hampshire*—Drs. S. G. Jarvis, J. A Smith, A. Morrell, C. P. Gage, J. F. Sargent, J. Caldwell, E. Custer, Thomas Wheat, E. H. Davis, H. C. Parker, each with encl. *New Jersey*—Dr. J M. Kollock. *New York*—Dr. G. K. Smith, Dr. J. V. D. Coon, with. encl.; Dr. Aug. Hühne, with encl.; Dr. L. C. McPhail, Dr. Bauer, Drs. L. A. Rodenstein, S. C. Grigg, N. H. Cheseborough, Josiah Cadmus, Robert ———, Anton Lidenbenz, D. F. Fetter, John Osborn, Wm. F. Osborn, Charles Black, J. N. Cowell, J. S. Cooper, W. H. Studley, Peter Cleary, R. Lehwess, W. G. Eadie, J. G. Clark C. Lettman, S. Kreutzer, R. P. Cook, C. V. A. Anderson, J. H. Vedder, A. Blood, ——— Newby, H. Bright, each with encl.; Dr. J. Hornberger. *Ohio*—Dr. H. P. Kay, Dr. John Williamson, Jr., with encl.; Dr. A. F. Bissell, Dr. N. B. Tyler, with encl. *Pennsylvania*—Drs H. Brubaker, with encl.; Dr. Thos. B. Shugert, Dr. A. A. Ziegenfuss, with encl.; Dr. Whilldin, with encl.; Dr. D. D. Loop, Dr. R. Armstrong, with encl.; Drs. S, S. & R. S. Wallace, Dr. E. N. Smith, Dr. J. G. Hillegass, with encl.; Dr. A. Nimnick, Dr. A. Lippincott, D. W. Hoover, Dr. N. G. Thompson. with encl. *South Carolina*—Dr. G. B. Higginbotham. *Vermont*—Drs. C. L. Allen, Cyrus Porter, Hannibal Porter, James Ross, S. Nicholls, J. N. Stiles, A. A. Crosby, each with enclosure.

Office Payments.—Drs. Pettingill, McClenachan, Griffin, Hamilton, Deacon.

VITAL STATISTICS.

Of Philadelphia, for the week ending Nov. 30, 1861:

Deaths—Males, 128; females, 109; boys, 74; girls, 66—Total, 237. Adults, 97; children, 140. Under two years of age, 73; Natives, 174; Foreign, 47. People of color, 16.

Among the causes of death we notice—Apoplexy, 1; convulsions, 10; croup, 9; cholera infantum, 1; cholera morbus, 0; consumption, 28; diphtheria, 11; diarrhœa and dysentery, 2; dropsy of head, 4; debility, 13; scarlet fever, 14; typhus and typhoid fever, 8; inflammation of brain, 1; of bowels, 4; of lungs, 16; bronchitis, 6; congestion of brain, 2; of lungs, 16; erysipelas, 0; whooping cough, 0; marasmus, 10; small pox, 8.

For week ending December 1, 1860.....229
" " November 30, 1861.....237

Of Boston, for the week ending Nov. 23, 1861:

Deaths — Males 39; females, 36. Total, 75. Natives, 54; Foreign, 21.

Among the causes of death we notice—Phthisis, 13; cholera infantum, 0; croup, 1; scarlet fever, 2; pneumonia, 11; variola, 0; dysentery 2; typhus fever, 1: diphtheria, 0; Whooping-Cough, 1; Convulsions, 0.

Of New York for the week ending Nov. 23:

Deaths—Males, 209; Females, 188; Boys, 115; Girls, 110. Total 397. Adults 172; Children 225. Under two years of age, 145. Natives, 272; Foreign, 125; Colored, 5.

Among causes of death we notice—Apoplexy, 7; infantile convulsions, 24; croup, 11; diphtheria, 9; scarlet fever, 20; typhus and typhoid fevers, 17; cholera infantum, 3; cholera morbus, 0; consumption, 59; small-pox, 13; dropsy of head, 6; infantile marasmus, 27; diarrhœa and dysentery, 11; inflammation of brain, 7; of bowels, 10; of lungs, 24; bronchitis, 6; congestion of brain, 9; of lungs, 12; erysipelas, 0; whooping cough, 1; measles, 4. 217 deaths occurred from acute disease, and 46 from violent causes.

Medical Directory.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth street.

Medical Clinic on Wednesday's and Saturday's, at 10 A. M., by Dr Gerhard.

Surgical do., at 11 A. M., by Dr. Geo. W. Norris.

Medical Library of the Pennsylvania Hospital—Open on Wednesdays and Saturdays.

Philadelphia Hospital.—Medical Clinic on Wednesdays and Saturdays, at 9½ A M., by Dr. J. L. Ludlow.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A. M., by Dr. D. H. Agnew.

Wills Hospital for the Eye and Limb.—Clinics, Wednesdays and Saturdays, at 11 A. M., by Dr. William Hunt.

Howard Hospital, Lombard street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P. M. Monday and Thursday—Dr. Turnbull, at 1 P. M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P. M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1, and Dr. Morehouse, at 5 P. M. Monday and Thursday—Dr. Meigs, at 5 P. M. Tuesday and Friday—Dr. Atkinson, at half-past 3 P. M.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P. M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesday's and Saturday's, at 1 P. M., by Prof. Smith.

Dispensary Service every afternoon at 3 P. M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street—Clinical Lectures, daily, (except Sunday,) from 2 to 4 P. M., by Dr. Goodwillie.

Philadelphia Lying-in Charity.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning at 9 o'clock, by Dr. Edwin Scholfield.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, No. 269. PHILADELPHIA, DECEMBER 14, 1861. New Series, Vol. VII. No. 11.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By Louis Bauer, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

INTRODUCTORY LECTURE.

Gentlemen:—Since the establishment of the Brooklyn Medical and Surgical Institute, quite a large number of patients afflicted with deformities have been received and attended to. The clinical material that has thus been placed at our disposal has been both considerable and instructive.

Actuated by the desire to render this institution subservient to the advancement of medical science and art, its enlightened Board of Trustees has decided to open its pathological resources to the profession at large, and to institute, during the ensuing winter, such lectures as may best tend to that result.

Having been appointed one of the lecturers, we have chosen the subject of Orthopædic Surgery—a comparatively new one on this continent, but, nevertheless, one of the most important and interesting branches of the healing art.

Heretofore, this subject has by no means received in this country that attention it so eminently deserves; and the professors of surgery have held out to students indifferent opportunities to become familiar with it, either theoretically or practically. While, therefore, the profession felt scarcely competent to take the responsibility in the treatment of distortions, and rather timorous to engage in it at all, the patients thus afflicted were either left without relief, or had to seek it among empyrists, pretenders, and mere mechanics.

The propriety of preferring the subject of orthopædy to any other, for the purpose assigned, can, therefore, not be questioned; and we confidently hope that some good results may accrue from our efforts, both in a professional and public point of view.

We, however, do not mean to say that this is the first attempt to render orthopædic surgery a common property of the profession. In a fragmentary form, clinical lectures have been delivered, from time to time, by Dr. Detmold, of New York, and at the present time, our esteemed friend, Prof. Lewis A. Sayre, is engaged in a complete course at the Bellevue Hospital Medical College of New York, which cannot fail to be highly instructive, and most certainly will enhance the practical efficiency of future practitioners.

Our lectures will not be entirely theoretical. The museum of this public institution is, in point of orthopædy, tolerably complete, and it will enable us to illustrate almost all the distortions by plaster casts, taken from life. We shall also embrace all clinical opportunities that may in the course of our lectures present themselves, to exemplify diagnosis and to test the rationale of our therapeutical principles and maxims. Our respect for your valuable time will protect you against worthless speculations. We mean to be brief, and, to the best of our humble ability, practical.

The knowledge of deformities is as ancient as deformities themselves. In the sixty-second chapter, "On the Articulations," of the works of Hippocrates, we find a comprehensive sketch of club-foot, its attendant symptoms, and fragmentary but correct views of its treatment. Very little was done to advance the knowledge on that subject for many centuries. We find but scattered and imperfect ideas by Ambrose Paré, Severinus, Arcæus, Fabricius ab Aquapendente, and others.

Professor Andrez, of Paris, was the first who collected the scattered information on orthopædy, put it in a tangible form, and introduced the collective title* which this branch of the healing art now bears. He attempted also to ferret out the common causes of deformities, and to establish general indications and maxims for their effective treatment. But he certainly transgressed the boundaries of orthopædic domain by including the deficiencies of the eye, ear, hair, nails, etc., thus mixing up heterogeneous subjects which had no pathological analogy to each other. Andreas Venet, of Switzerland, subsequently (1780) corrected the errors of Andral, and established the proper limits. Venet was the first who created (at or before) an institution for the exclusive treatment of distortions of the human frame. From that time orthopædy began to enlist the interest and ardor of eminent practitioners, and their efforts gave it a more scientific character.

In connection with the early advancement of orthopædy, it is but just to mention with distinction the names of Bruckner, Camper, Wenzel, Paletta, Scarpa, Söemmering, Delpech, Heine and others. But the greatest, and certainly most important impetus for its scientific culture, orthopædy derived from the introduction of subcutaneous myotomy and tenotomy by Stromeyer. That operation at once rendered a large proportion of deformities amenable to treatment, which before had been set down as beyond reach of surgical means. Other improvements have since followed in rapid succession.

The discovery of anæsthetics has largely aided in advancing orthopædic science, and we have now arrived at a period in which it may be safely placed alongside with other branches of scientific medicine, without detriment to their dignity and perfection.

Orthopædic surgery has for many years been a favorite subject in Germany, and her most distinguished surgeons have assiduously joined in its culture. Besides Stromeyer, Dieffenbach, Loriazer, B. Langenbeck, Robert, Berend and other prominent men have productively labored for it. In France, Jules Guérin, Major, Marjolin, Malgaigne, and Louvrier have materially aided in diffusing and improving orthopædic practice.

Dr. Little has been its chief apostle and promoter in England. Himself a sufferer from congenital club-foot, he went to Germany, and obtained relief at the masterly hands of Stromeyer and Dieffenbach. With grateful enthusiasm for the new method of treatment, and determined to extend its benefits to his fellow-sufferers, he zealously entered upon the enterprise of establishing an orthopædic hospital, in which it is but just to say he was most generously aided by his countrymen. Nobody can pass Bloomsbury Square, in London, and see the noble institution, the Royal Orthopædic Hospital, and read its reports of the thousands of patients that have received therein aid and comfort, without thinking of the beneficence and great scientific merits of its founder and chief laborer.

The inestimable boon which that charity has bestowed upon the poor and helpless may best be realized in the 12,000 patients that were attended and relieved in one decennium, (1841 to 1851.) And the numerous literary publications that have from time to time emanated from the medical officers of that institution are sufficient evidences of its scientific working.

As soon as the practical requirements of orthopædic charities had thus been demonstrated, they became established in most of the great cities of the United Kingdom, and we believe it to be no exaggeration in stating that at the present 12,000 patients, afflicted with deformities, received in the course of one year gratuitous attendance in Great Britain.

In the United States the historical records of orthopædy are not so favorable. Its advancement has met with serious obstacles on the part of the profession, and all attempts at cultivating it as a specialty have, as specialties in general, been frowned down as the pretenses of quackery.

As a mere subordinate branch of surgical art, orthopædy could never develop itself to that degree of perfection it has acquired elsewhere by special devotion and culture. Public and private institutions for the exclusive treatment of deformities are highly prosperous in Europe, not by virtue of their pretenses, but by the amount of actual relief they afford to patients. Besides the discipline of the patients, so indispensable for methodical and mechanical treatment, they are provided with all the facilities and requirements of an efficacious management. They have competent nurses and medical attendants, which in a private dwelling are scarcely to be obtained.

The objections of the profession to specialties

* L'orthopædie ou l'art de prevenir et de corrige dans les enfants les deformites du corp. Paris, 1741.

are based partly on wrong premises, partly on mere notions. The country abounds with quacks and pretenders, who victimize and fleece the community at a fearful rate. There is no law that arrests their illegitimate invasion of the professional domain. They presume with impunity on the honorably-acquired character of the profession, and unscrupulously override all decency and honesty. They gather around themselves sufferers by the hundred, and are inexhaustible in their promises and schemes to delude the ignorant and credulous portion of the people. What medical art is impotent to achieve, the quacks arrogantly claim as their divine secret. Divination is their inheritance, from which the profession is obviously excluded, and Newton is the great redeemer of afflicted humanity.

But what does all this infamous business of dishonest speculators prove against the scientific and legitimate pursuit of specialties? Nothing. It certainly does not follow that specialties would undergo the same degeneration from their honest course, and culminate in pretentious quackery. In Europe this has not been the case; and the few specialties that have been fostered in our midst have certainly given no cause for apprehensions of this kind.

On the other hand, it must be admitted that the rapid advancement of medical science and art during the present century is in a great measure owing to the division of labor. Without the special investigation of Lænnec, Skoda, and Traube, our knowledge of the diseases of the lungs and heart would be in its infancy. Cramer has almost entirely created anew the pathology of the hearing apparatus. Von Graefe is assiduously at work to reconstruct ophthalmology on a physical and rational basis, and for that Augean labor he certainly deserves our admiration and support. And must we remind you of the ingenious improvements our distinguished countryman Dr. Marion Sims has wrought in one of the most fearful defects women are liable to? Read the history of the operation for Vesico-Vaginal Fistula, and you will find that his whole time has been absorbed in perfecting its technicalities. The same influence of specialty we could prove in almost every department of medical science, sufficiently established, at any rate, to remove objections so utterly groundless.

We do not, of course, advocate the establishment of specialties at the expense of medical science and independent of it. On the contrary, they should emanate from medical science; they should receive their chief maintenance from it, and return its results to the same source from whence it originated. Not as the ancient Egyptians pursued specialties *per se*, and disconnected from each other. Such a system would be prejudicial to scientific advancement, unproductive of practical results, and terminate eventually in the crudest empiricism. That system has been finally adjudicated by history, and has certainly no earthly chance of being resuscitated.

The steady progress of medical science and its already acquired magnitude will inevitably settle the pending question. Practitioners will have to choose between general superficiality and special efficacy.

With these premises, we yet hope to see the day that in this country orthopædic hospitals and institutions will spring up, where the afflicted and distorted will find ready and efficient aid.

After this opportune digression, we beg to resume our subject. If we are correctly informed, it was Dr. Detmold who introduced tenotomy into the United States. Having enjoyed the inestimable privilege of Stromeyer's personal tuition, he commenced his orthopædic career with the enthusiasm and energy of a brilliant intellect. Great must have been the inducement to that talented surgeon to cultivate as a specialty the large, undisputed, and heretofore unexplored field; and we understand that he zealously labored to render his knowledge alike useful to the deformed and to the profession. Yet the professional notions he had to encounter must have been too strong for his perseverance, and thus he had to content himself with the ordinary professional rank.

No American surgeon realized the importance of orthopædic surgery more fully, and felt more earnest desire for its propagation, than our venerable Nestor, Valentine Mott. In his interesting "Travels in Europe and the East," (New York, 1842,) he expresses himself in the highest terms of appreciation of "this illustrious era of the healing art." Indeed, though at the eve of an eventful and useful life, and distinguished by all the honors of a grateful country, his enthusiasm was so deeply aroused as to express his determination to lend his influential aid in the erection of "an American orthopædic institution" in the City of New York, that the principles "of that inestimable science might be diffused far and wide." But even Dr. Mott yielded

to professional prejudice, an enterprise which enthusiasm and "gratitude to Guerin, to his friends and country," had conceived, and which could not have failed in contributing greatly to the relief of the poor and helpless and the promotion of professional interest; an enterprise which he himself estimated as the crowning art of his long and fruitful life.

To be Continued.

COMMUNICATIONS.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

By Geo. K. Smith, M.D.,
Demonstrator of Anatomy in the Long Island College Hospital, Brooklyn, New York.

While listening to the lectures of Professor Hamilton on Fractures and Dislocations, delivered at the Long Island College Hospital, in the spring and summer of 1860, I became very much interested in the study of fracture of the neck of the femur within the capsular ligament; and, after reading considerable on that subject, I was led to wonder why it was that a given specimen, presented as an illustration of bony union after fracture of the neck, should, when viewed by different surgeons of equal merit, give rise to such widely different and conflicting opinions: some regarding it as an example of bony union of intra-capsular fracture; some of union partly without the capsule; while others denied that the bone was ever fractured, and declared that its morbid appearances were characteristic of interstitial absorption. An illustration of this singular fact is seen in a case reported by Professor Mussey, of Cincinnati, in the April number of the *American Journal of Medical Sciences* for the year 1857. Of this specimen, Professor Mussey writes as follows:—

"In the year 1830 I showed this to MM. Roux and Amussat, and some other professional gentlemen, in Paris. They regarded it as a fair specimen of bony union of intra-capsular fracture. In London I also showed it to Mr. Lawrence, Mr. Travers, Mr. Stanley, and Dr. Hodgkin, who was then Curator of the Museum at Guy's Hospital. These gentlemen were interested with the specimen, and considered it as a satisfactory example of bony union within the capsular ligament. On my presenting it for inspection to Sir Astley Cooper, he remarked: 'This bone was never broken.' I said, Sir Astley, please to look at the interior of the bone. He separated the two halves, and said: 'This does look a little more like it, to be sure; but I do not think it is wholly within the capsular ligament.' At Edinburgh, I showed it to that distinguished surgeon, John Thompson, whose work on inflammation had given him extensive notoriety. On carefully inspecting it, he declared, 'upon his truth and honor,' that it had never been broken. An opinion had prevailed for some time among surgeons, that in old persons the head of the thigh-bone is liable to sink below its ordinary level, with more or less shortening of the neck, which occurs in certain morbid conditions without the aid of mechanical violence. Mr. Thompson regarded this as an instance of that kind of change."

Dr. Mussey further states that—

"The professional gentlemen of our own country who have examined these specimens, unhesitatingly pronounce this to be a case of union by bone of intra-capsular fracture."

Some specimens have been presented as proofs of bony union, concerning which the diagnosis of fracture was never clearly made out; and, in these instances, we were not surprised that some should deny that the bone was ever fractured, and that they should regard the morbid appearances of the bone as being characteristic of interstitial absorption of the neck.

I could see no satisfactory reason, however, for the difference of opinion among those who regarded the specimen as an example of bony union; for, if the capsular attachment to the neck be definite and invariable in its location, as described by Wilson and Gray, then it seemed easy to ascertain, by actual measurement, whether the line of union in any specimen be entirely within or partly without the capsule. Here it occurred to me that there might possibly be a variation in the locality of capsular attachment to the neck; and, if so, this fact would account, in a great measure, for the endless contention of surgeons over the possibility of bony union within the capsule. This supposition was materially strengthened by the fact that, in numerous instances, the surgeon, who made the autopsy after union of fracture of the neck, and examined the specimen before the removal of the capsular ligament, was convinced that the fracture was entirely within the capsule; while other surgeons, equally competent to judge of the point at issue, who saw the specimen after the removal of the capsular ligament, were positive that the fracture was partly without the capsule.

Entertaining this suspicion concerning the location of capsular attachment, I determined to

ascertain, by actual observation and accurate measurement of numerous specimens of the normal capsule, whether it ever varied in its insertion from the descriptions given by Wilson and Gray. I had examined but a few specimens before I learned that the line of capsular attachment to the neck was by no means invariable; and so great were its variations, that it seemed almost impossible that the dried bone should, in any instance, furnish positive proof that the fracture had been entirely within the capsule. I reasoned from this fact that, if, in the investigation of the question of bony union, the capsular ligament had been distended and dried with each specimen, the vexed question of osseous union within the capsule would long since have been settled; for, after being dried, and a section made of the bone and its capsule, leaving on one part enough of the capsule to indicate its attachment to the other, the latter might be macerated or boiled, to test the solidity of the union, while the former would ever afterward indicate the locality of the fracture in respect to the attachment of the capsule to the neck of the bone. But even this process leads to error; for, as we shall see hereafter, the capsule of the fractured bone is not only thickened by the inflammatory action which follows the injury, but also lengthened, being in some instances inserted posteriorly into the shaft of the bone, instead of its normal insertion into the neck, which has been removed by absorption.

After finding that scarcely any two capsules, taken from different subjects, were identical in point of attachment to the neck, I consulted other works on anatomy, to see if they agreed with Wilson and Gray in locating the attachment of the capsule.

From these several authors I quote the following:—

"The capsular ligament arises from the dorsum of the acetabulum, incloses the cotyloid ligament as it ascends, but does not adhere to it except at the notch; it is also connected to the inferior spine of the ilium and to the obturator ligament; it is inserted into the base of the neck of the femur, being longer behind and below than in any other situation."*

To this is added the following note by Prof. Watts, the American editor:—

"This ligament includes the neck of the femur to such an extent that a fracture of the neck within the capsular ligament can and does take place, usually, however, in old subjects. The ligament includes the neck more completely anteriorly, where it extends as far as to the anterior inter-trochanteric line, whereas posteriorly the ligament is lost upon the periosteum, several lines within the posterior inter-trochanteric line."

"This ligament incloses all the bones from the edges of the socket to the roots of the trochanters, embracing not only the head, but the neck of the thigh-bone."*

"It embraces that part of the head of the os femoris which projects above the margin of the acetabulum and descends along the neck to its root. It is longer in front; is fixed there to the oblique line which runs between the two trochanters, and behind into the root of the neck, a little in advance of the posterior oblique ridge.

"Above it is fixed to the neck just below the rough fossa in the trochanter major; and on the under surface of the neck it adheres just above the trochanter minor."†

"The capsular ligament which contains these articulating parts is the strongest in the body. It arises around the acetabulum near the basis of the cartilaginous brim, but it does not adhere to the cartilaginous edge, and it is inserted into the os femoris near the roots of the trochanters, so that it includes a large portion of the neck of the bone."‡

"Its inferior circumference is inserted in front into the oblique line leading from one trochanter to the other; but superiorly and behind its fibers are implanted into the neck of the bone within a quarter of an inch of the trochanteric fossa, and about the same distance from the posterior inter-trochanteric line."§

"The capsular ligament of the hip-joint is the strongest one of the body. It is attached by its upper extremity around the border of the acetabulum inclosing the cotyloid ligament; and by its lower extremity is attached to the anterior inter-trochanteric ridge of the femur, and less strongly to the neck of the latter, just above the posterior inter-trochanteric ridge."‖

"It is inserted superiorly and externally into the root of the neck, internal to the digital fossa of the great trochanter; anteriorly into the anterior inter-trochanteric ridge and into the fore part of the neck above this line; internally and inferiorly it descends near to the root of the lesser trochanter, and is inserted into the neck about a quarter of an inch above the posterior inter-trochanteric ridge."¶

"Its inferior circumference is inserted in front into the oblique line leading from one trochanter to the other; but superiorly and behind, its fibers are implanted into the neck of the bone within a quarter of an inch of the trochanteric fossa, and

* Dublin Dissector, p. 517.

* Bell's Anatomy, vol. i. p. 301.
† Horner's Anatomy, vol. i. p. 295.
‡ Pancoast's Wistar, vol. i. p. 258.
§ Elements of Anatomy, by Jones Quain, p. 273.
‖ Leidy's Anatomy, p. 159.
¶ Harrison's Anatomy, p. 668.

about the same distance from the posterior inter-trochanteric line."*

"The femoral insertion of the capsular ligament requires to be carefully studied, for the purpose of explaining the difference between fractures within, and fractures beyond, the capsule. This insertion is so arranged, that at the upper part and in front of the joint, it corresponds with the base of the neck of the femur, while beneath and behind it is situated at the junction of the external with the two internal thirds of the neck. The insertion of the capsule in front takes place not only at the base of the neck of the femur, but also internally to this base, to the extent of several lines, as may be ascertained by an incision being made along this insertion in the direction of the axis of the neck."†

"It arises round the outside of the brim of the acetabulum, embraces the head of the thigh-bone, and incloses the whole of its cervix as far as the root or outer extremity, round which it is firmly connected."‡

"Its lower circumference surrounds the neck of the femur, being attached, in front, to the spiral or anterior inter-trochanteric line; above, to the base of the neck; behind, to the middle of the neck of the bone, about three-quarters of an inch from the posterior inter-trochanteric line."§

"The capsular ligament arises from the whole circumference of the acetabulum, and passing outwards is inserted into the neck of the femur. In front it is inserted into that line which extends from the greater to the lesser trochanter; posteriorly, it does not extend so far outwards, but is inserted into the neck of the bone about midway between its head and the trochanter major; at its insertion it is incorporated with the periosteum."‖

Prof. Alden March, of Albany, in a paper entitled "Osseous Union of Intra-capsular Fracture of the Neck of the Femur," published in the Transactions of the Medical Society of the State of New York for the year 1858, has questioned the authority of Wilson's Anatomy in locating the insertion of the capsule, and gives his opinion as follows:—

"It is a matter of some importance to define accurately the attachments and extent of the capsule. For the question of deciding whether a given fracture be altogether within, or partly within and partly without, the capsular ligament, will often depend upon the *precise point* of location of its attachments.

"The ligamentous capsule embraces, or is attached to the margin of the *acetabulum* superiorly, and inferiorly and anteriorly to the inter-trochanteric line, superiorly and posteriorly to the neck of the bone just within the *trochanteric* or *digital fossa*, and within the posterior *inter-trochanteric line*, or lip of bone extending from the *trochanter major* to the *trochanter minor*.

"Wilson says the capsule 'extends further upon the neck of the femur on the *anterior* and *superior*, than on the *posterior* and *inferior* side, being attached to the inter-trochanteric line in front, to the base of the great trochanter above, and to the middle of the neck of the femur behind.'

"Judging from a number of specimens I have examined, and from those herewith submitted for inspection, it would appear that the capsule is not attached 'to the middle of the neck of the femur behind,' as above quoted from Wilson's System of Anatomy. If the capsule were attached to the *middle of the neck*, then, indeed, we apprehend it would seldom happen that we should meet with fracture altogether within it.

"The capsular ligament is firmly attached to the os innominatum. Passing in various directions, according to their several situations, the fibers run to be inserted into the base of the neck of the femur, anteriorly into the anterior inter-trochanteric line, superiorly and externally into the surface of the bone close to the digital fossa at the root of the great trochanter, inferiorly and internally to the line leading from the lesser trochanter to the anterior inter-trochanteric line, and posteriorly it is partly reflected upwards, so as to become continuous with the periosteum of the posterior part of the neck of the bone; this reflection taking place along the posterior inter-trochanteric line, and partly inserted into that line, especially at its internal and external extremities."*

"The capsular ligament represents a kind of shut sac, which is attached, on the one hand, to the periphery of the cotyloid cavity, and on the other, to the prominent lines which extend, in front and behind, from one trochanter to the other, thus including both the head and neck of the bone. It descends further down on the anterior than on the posterior surface of the neck, and is thicker and stronger above and behind than in any other portion of its extent."†

It will be observed, in this connection, that, notwithstanding the extreme diversity among our authors in describing the *precise location* of the insertion of the capsule, not a single one, even, intimates that it ever varies from the position which he has assigned to it. All agree in locating the insertion of the capsule in front, at the anterior inter-trochanteric line, with the exception of Cruveilhier and Harrison, who state that it is also inserted into the anterior surface of the neck to the extent of several lines internal to the anterior inter-trochanteric line. Concerning its insertion into the posterior surface of the neck,

* Sharpey and Quain's Anatomy, p. 278.
† Cruveilhier's Anatomy, American edition, p. 160.
‡ Fyfe's Anatomy, vol. i. p. 359.
§ Gray's Anatomy, p. 170.
‖ Cooper on Dislocations and Fractures, American ed., p. 73.

* Cyclopædia of Anatomy and Physiology, by Robert B. Todd, M.D., F.R.S., vol. ii. p. 778.
† Gross's System of Surgery, vol. ii. page 230.

great differences of opinion exist. Some locate it at the middle of the posterior surface of the neck; some at the posterior inter-trochanteric line; and others at all points intermediate between these two extremes. From this we see that he who has a specimen representing union at any point between the head of the bone and the inter-trochanteric lines, can find authority among anatomists for believing it to be union of intra-capsular fracture. Sir Astley Cooper located its insertion at the middle of the posterior surface of the neck, and regarded, as examples of union partly without the capsule, all those specimens in which the line of union on the posterior surface of the neck was found to be nearer the shaft of the bone than the middle of the neck; hence we see the reason why those who located the insertion of the capsule at the posterior inter-trochanteric line should deny the authority of Sir Astley, and regard all such specimens as genuine examples of union within the capsule.

To be Continued.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. Gerhard.

December 7, 1861.

OBSTINATE VOMITING.

This was the case of a German, thirty-three years of age, a shoemaker, admitted to the hospital October 13th, for persistent vomiting, with which he has been troubled, more or less constantly, for six years past; he is temperate, but drinks an occasional glass of lager; was much emaciated and very feeble when he came here, but has gained flesh, and his complexion has changed from a pale hue to florid; has had no vomiting since he came here. This is in part owing to the change in his habits—his occupation required him to sit in a bent position—in part to the regulation of his diet, which has been arrow-root and milk with a small piece of bread, in the morning and evening, and beef broth and bread at dinner, and in part to the medicine. He has taken—

℞.—Acid. Tannici, gr. ij;
Pulv. Opii, gr. ¼. M.
Every four hours.

His tongue is slightly coated, pulse regular, skin cool, no fever; his bowels are open once a day; stools natural in color. On examination of his abdomen we find no evidence of tumor in stomach, we therefore conclude it is not cancerous; the stomach is a little gaseous, showing that digestion is imperfectly performed. There is no enlargement of liver. The treatment already mentioned may be continued and his diet may be increased. The object of the opium in this case is to allay irritation of the stomach, and it has acted favorably. It sometimes occurs that patients cannot take opium, or fancy they cannot. In such cases I have found it to be well tolerated when given without their knowledge.

INTERMITTENT FEVER—PLEURISY.

This was the case of a female who had been visiting at a place opposite Trenton, New Jersey, which at certain periods is extremely subject to intermittent fever. The family in whose service she has been employed have all had the fever, even to the infant eighteen months old. She has been sick three months, having chills every other night. Her skin is of a saffron color, evincing a disordered action of the liver, which may be in a congested state. In later stages of this disease we find organic disease of this organ, as also of the spleen, which in this case is slightly enlarged, extending to 4½ inches in length. The liver presents no enlargement. In addition to the intermittent, she was attacked about two weeks since with pain upon the left side of the chest, which afterward extended to the right side, following the disease of the spleen. The pain is most severe when coughing. The heart is functionally diseased; we find the bellows murmur in its systole, which I think arises from the alteration of the elements of the blood as a result of this affection, and not from any affection of the nervous system. The serum of the blood is increased.

If now we examine the chest, we find it dilated upon the right side, contracted upon the left. This is ascertained by the sight. On percussion the sound is full, and clear on the left side, on the right dull. By auscultation we find the vesicular murmur is feeble, and we have a feeble blowing inspiration and expiration upon the right side at the lower portion of the lung; in the middle portion we have the friction sound just at the point where the dullness of percussion commences. In the left lung there is a mere trace of mucous rhonchus. We therefore conclude she has pleurisy, but no pneumonia complicating it. The lung is compressed, not congested. The friction sound, together with the feebleness of the vesicular murmur, indicates the pleurisy, and it is readily distinguished from hydrothorax by the two physical signs just mentioned, and by the fact that the latter occupies both sides, while the pleurisy is confined to one. But there is effusion here of what? Of serum and of a small quantity of lymph undoubtedly, and from the extent of the dullness we judge the effusion to amount to not less than a quart. Sometimes the effusion is almost entirely of lymph, but it is not so apt to occur in anæmic cases like the present one.

In the treatment we must have reference to the complication of the fever, which can be best combated by quinine. Give her quinine grs. jv four times in the twenty-four hours. To counteract the

effusion a blister 3 by 4 may be applied low down upon her chest. Blisters act well in the later stages of pleurisy, and small blisters repeated are more beneficial than large ones, Irritation is thus avoided and we are enabled to apply a succession of blisters if need be. She may also take Potassæ Nitras 3j dissolved in water Oss during the day. Her diet should be nourishing—soups, but no meat. If cough be violent, opium may be necessary. Under this treatment the prognosis is favorable.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC.

Service of Prof. Gross.

November 30, 1861.

TUMOR IN AXILLA.

A female, twenty-eight years of age, married; nursing a child eight months old; general health good; tumor of four years standing in left axilla, extending down near to left mamma; movable; prominent portion elastic; circumscribed; an enlargement of the lymphatic ganglia strumous in its character; non-malignant. An operation in this case should be delayed, as it would interfere with the process of lactation, and the delay will occasion no untoward result. Meanwhile, paint the tumor with tincture iodine and alcohol, equal parts; give—

℞.—Massæ. pil. hyd.
Extr. colocynth. āā gr. v,

as a purgative, and also liquid chloride of barium gtt. vj twice a day, increasing by one drop every other day to eight or ten. This is one of the best and most powerful alteratives. Diet should be carefully restricted.

December 4, 1861.

NÆVUS MATERNI.

The location of this tumor is upon the upper lip, causing great deformity, but not preventing the child from nursing. It throbs under the finger; is purple in color; and is greatly increased in size by the crying of the child. It consists in a hypertrophy of the capillaries, and may, if not extirpated, give rise, by the ulcerative process, to dangerous hemorrhage. Various methods of extirpation have been proposed, as puncturing by means of needles heated to a black heat; injection of astringent fluids; vaccination; but that which I prefer, as the simplest and best, is the ligature. In this operation two ligatures are carried through the base of the tumor by means of a curved needle, which has an eye at its pointed extremity, and the tumor is strangulated by tying the adjacent ends. In a little time lymph is thrown out, which closes the mouths of the capillary vessels, and the parts slough off.

MERCURIALIZATION—DEFORMITY.

This was the case of a youth from the country, who, some five years ago, had typhoid fever, during the progress of which he was salivated. The result of this treatment was the loss of teeth on the right side and the sloughing of a portion of his cheek, making a serious deformity, enlarging his mouth to nearly twice its natural size. Mercury is a valuable remedy when rightly used. I should hardly be justified in saying that its employment had done more injury than good; but this I may say, it is sometimes given when there are no indications for its use. In patients suffering under typhoid fever, or some of the exanthemata, it should be used cautiously, if at all. It is better to withhold the remedy when it is not clearly necessary; and it may be questioned whether it would not be better that the patient should die than to be mutilated for life. The physician who prescribes it may not be blamable, but his reputation must inevitably suffer in every such bad result.

We propose to remedy the deformity in this case by a plastic operation, which consists in paring the edges of the opening, and then in transplanting to it a portion of the adjacent skin and cellular tissue, carefully preserving its connection with the surrounding parts, and retaining it in place by means of wire sutures. In this way a tolerably good lip will be formed.

December 7, 1861.

SECONDARY SYPHILIS.

J. H., aged twenty-one, has had sore-throat two months; came on gradually; had two chancres on penis, and slight bubo, not terminating in suppuration; chancres soft, probably as the hard chancre is generally solitary, and quite difficult of cure. Ricord asserts that no secondary symptoms follow soft chancre. Such is not my belief, after careful observation.

On examining the throat, find inflammation of fauces and a peculiar copper-colored redness throughout. On the arch of the palate, lips, and dorsal surface of the tongue there are slight elevations of the mucous and submucous tissues, forming what are denominated mucous tubercles, which are incrusted with plastic matter, looking as if touched with nitrate of silver. These are hard, indurated. On examining the neck, we find enlarged lymphatic ganglia, just below the angle of the jaw; and the posterior cervical ganglia are also enlarged. In the treatment of this case no specifics are necessary; they might prove injurious. Treat it as you would an ordinary inflammation. Touch the parts with nitrate of silver in substance once in forty-eight hours; give a gentle purge, and let him take the antimonial and saline mixture with veratrum viride.

Scurvy among the Troops.—The *Chicago Medical Examiner* says that the surgeon of the Fifth Iowa Regiment reports that scurvy has appeared among the Missouri soldiers, in the form of swollen legs, purpura hemorrhagica, debility, etc., the result of two months' diet of salt meat, hard bread, few potatoes, and no other vegetables.

Medical Societies.

TRANSACTIONS OF THE BROOKLYN MEDICO-CHIRURGICAL SOCIETY.

WATER-BEDS IN SURGICAL PRACTICE.

In inviting the attention of the society to the subject, Dr. Bauer remarked that there were few practitioners who would not readily admit the available qualities of the "water-bed" for the comfort, ease, and the protection of the patient against decubitus. Notwithstanding this general concession, the water-bed was practically almost entirely precluded from being used in private practice, and certainly not sufficiently often in hospitals. Formerly the price of the article might have been assigned as the cause of its preclusion, but of late it had been materially reduced, and thus the chief obstacle removed. An ordinary water-mattress could now be procured for $10. But it was hardly necessary to go even to that expense, since water-cushions would suffice in most instances. For some time past the Doctor had them made of different sizes, at an average price of $4 each, and had derived much benefit from their application. At this moment he has seven patients on water-cushions :—

1. A girl whose knee-joint he had resected five weeks ago, during which time she had been reduced by suppuration, and remained in the same supine posture so favorable to bed-sores. Yet she has been perfectly comfortable, and free from inconvenience on that score.

2. A little boy with caries of left hip-joint. When he was placed upon the water-cushion three weeks ago, his sacral region was already tender and red. Now, all danger of decubitus has disappeared, although there is as yet no change in his articular disease.

3. A little boy afflicted with posterior curvature of the spine, and paraplegia depending upon it. Before, he could not lay upon his back, his spine being too tender for the contact with an ordinary mattress. The water-cushion has given him most material relief in supporting his entire back without pressing upon any one point in particular, and certainly has acted like a dorsal splint. The improvement of the patient since is significant in every respect.

4. A little boy with a cold abscess of his back, which originated below the dorsal aponeurosis. The abscess has been freely laid open, and is now kindly suppurating. The ordinary bed was exceedingly inconvenient to him; he complained about pain, and he distorted his trunk in order to get a restful position, and failed, at that, to rest comfortably. Since the use of the water-cushion (a week) the change in the boy's condition for the better is noticeable.

But the usefulness of the water-cushion in surgical practice could be greatly extended beyond its present limits. Dr. Bauer was of the opinion that it was the very thing upon which to place injured extremities, by burns, contusions, fractures, and most especially compound and comminuted ones.

The water-cushion would, better than anything else, secure rest and firm position without pressure. Moreover, it would protect against excoriation of the heel, and was certainly the cleanest and most appropriate material, if fomentations, cataplasms, or irrigations should be deemed desirable. His esteemed friend, Professor Dan. Ayres, had constructed a gutter-cushion filled with bran or sawdust, which, in fractures of the leg, had most effectually prevented excoriation of the heel; the water-cushion, he thought, would excel it.

In wounds of the head, contusion and diseases of the brain, a water-pillow would be preferable to an ordinary one, for reasons that required no further explanations.

These few and brief remarks Dr. Bauer hoped would suffice to indicate the great usefulness of water-beds, cushions, and pillows in surgical practice, and to facilitate their more general introduction.

DR. BAUER'S CASE OF EXTENSIVE ENCEPHALO-MELANOSIS.

The patient from whom the pathological specimens were derived was a German woman, thirty-five years of age. She had given birth to several children, all of good health. Her disease commenced eighteen months ago with exophthalmos of the right eye, soon followed by an enlargement of the right superior maxilla, which in course of time so much increased as to force the eye upward and outward. The nose was turned to the opposite side. The cause of this was an encephaloid tumor that filled the antrum of Highmore, the right nasal cavity, and encroached upon the pharynx and mouth. Simultaneous with the development of the maxillary tumor, numerous others of a similar nature appeared in the skin, the subcutaneous cellular tissue, and the lymphatic and mammary glands. On post-mortem examination the liver, pancreas, and both ovaries were likewise invaded. The pancreas presented the appearance of a large-sized bunch of grapes. The stomach had shrunk to a third of its usual size. In most of the cancerous deposits there was a large complement of melanotic material. Dr. Bauer had seen the patient but a few days previous to her death, and he was surprised to find the displaced eye still susceptible to light. The cancerous mass in the right nostril bled freely at the slightest provocation. She was born with numerous pigmentary deposits on her forehead and right eyelids, as if she had suffered from the explosion of gunpowder. Hereditary taint of cancerous disease could not be traced. The large extent of the deposits was rather a surprising fact in a primitive disease of this class.

Gunshot Wounds of the Lung.—Dr. Pineo, Brigade Surgeon, says, in the *Boston Medical Journal*, that three cases in which bullets passed through the lung, producing emphysema, and escape of air from the wound, have occurred under his recent observation, and that all recovered.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Reported by William B. Atkinson, M.D., Recording Secretary.

Wednesday Evening, October 9th, 1861.

PUERPERAL CONVULSIONS.

Dr. Andrew Nebinger, in introducing the subject for the evening's discussion, desired to do so in such a manner as would draw from the members the experience which they had severally acquired. He took a hurried glance at the literature of his subject, and first invited attention to the nature of the disease as presented by a few of the authorities.

Cazeaux regards the true puerperal convulsion not as a hysteric, epileptic, apoplectic, cataleptic, or tetanic convulsion. While he declares that any of these conditions may occur in the pregnant or parturient female, yet they are only these diseases somewhat modified by her condition; "as is the case," he says, "in all other diseases that occur during the puerperal period, the danger to which they expose the patient is increased by that to which they subject the fœtus; but the hysteria does not thereby become less a hysteria, and the tetanic convulsion has not less of its characteristic persistence." * * * In his opinion, it must be admitted that during gestation the woman may have an attack of apoplexy, etc., but it is a distinct affection, having but one symptom in common with eclampsia, the convulsion. The same writer remarks: "Among the various convulsive diseases that may be manifested during pregnancy, parturition, or the lying-in, there is one which has such well-marked characteristics, and whose physiognomy is so peculiar, that I can scarcely comprehend the want of accuracy that still exists in most of all classic works on this subject. This confusion evidently arises from the fact that the authors who have written on puerperal convulsions have included under this title all the affections whose striking characteristic is a convulsion; forgetting that the epithet 'puerperal' must not be applied to every disease developed before, during, or after the accouchment, but simply to one that is intimately associated with that state, and which is only produced pending its duration." Hence this author may be understood as regarding the eclampsia of puerperal women as a disease *sui generis*, and deriving its peculiar characters from the changes which have taken place in the general system; perhaps more particularly in the cerebro-spinal system, as a sequence of the important change which had been produced in the generative system.

Churchill makes three varieties of these convulsions, viz., hysteric, epileptic, and apoplectic. Colombat explains the term eclampsia, eclampsia parturientium, as meaning the epileptiform attack of convulsions depending upon the puerperal state; though the spasms may be present under the form of hysteria, tetanus, or catalepsy. Nor does he regard them as true epilepsy, for he says though epilepsy bears a close resemblance to puerperal convulsions, yet there is a marked distinction in the closing of the paroxysm. In eclampsia the stupor is much more decided and lasting. Ramsbotham considers this affection as more allied to apoplexy, and usually depending upon exactly the same causes; unlike it, however, in having the convulsive fits, and never having any permanent paralysis. He sums up thus: "I look upon a case of puerperal convulsions to be in fact one of apoplexy; only that we have superadded to the common apoplectic phenomena violent spasmodic contractions, and this symptom is dependent upon the irritable and excitable state of the nervous system, always in a greater or less degree accompanying pregnancy and parturition." Dewees holds views identical with those of Churchill.

Meigs regards all females as influenced powerfully by their generation sphere, as understood by the word hysteria or the hysterical influence; and pregnant women as still more under that influence. The sur-nervous excitement he considers is independent of any changes in the blood, or brain, or nervous system at large; and this he views as the fundamental principle of every sort of child-bed convulsion.

Hodge does not believe there is any essential pathological difference between the usual form of puerperal convulsions and those which occur in the parturient state in hysterical women. The only real difference is the degree of congestion: trifling in the unimpregnated condition, very great during gestation, and more so during labor.

Carl Braun is of opinion that the true puerperal convulsion is an acute affection of the motor functions of the nervous system, (an acute neurosis of mobility,) and that it occurs only as an accessory phenomenon of another disease, generally Bright's disease in its acute form. He concludes that the latter affection and uræmic intoxication of the blood are the causes of eclampsia, not its results, and the eclamptic convulsions of women during pregnancy are identical with fits of adults in general that are produced by uræmia in the course of acute Bright's disease.

Upon this subject, Frerichs and Braun are united. Scanzoni teaches that puerperal convulsions depend upon an irritation of the spinal nerve centers, as there is generally found in post mortems a hyperæmia of the spinal cord and its envelopes.

From this exposé of the views of so many distinguished authors, we see the great want of agreement in opinion. Yet while there is a positive want of harmony, there is nevertheless more agreement than might be supposed, and which will be made evident by a careful comparison.

With reference to the cause of the disorder, Ramsbotham regards it as produced by pressure on the brain, as by the sudden effusion of blood from a ruptured vessel, or by a serous exudation into the ventricles or between the membranes, or, most frequently, from simple congestion of the cerebral vessels themselves. Among the remote

causes he places indigestion, irritation of the alimentary canal, general irritability of the system, depressing passions, over-distention of the uterus, and death of the fœtus; but "much more frequently the cause may be found in some deranged state of the uterus itself, probably in its nervous system, and consists in some irritation propagated from that organ to the brain."

Colombat adds to the former list the pains of labor, and observes: "The attack does most commonly take place when the pains have reached the *summum* of their intensity." He sums up: "It is our opinion that the determining cause of eclampsia occurring during the course of pregnancy is the result of exaggerated sympathetic reaction of the womb upon the nervous system." Among the causes, he mentions coagula and retained remnants of the placenta in the womb.

Churchill sets down want of sleep, fatigue, and indigestion as causes of the hysteric variety; and sympathy of the brain with some other organs, as the uterus, stomach, or bowels, as the cause of his epileptic form; and stress upon the cerebral vessels during labor as the cause of the apoplectic form.

Laycock considers the immediate cause to be a loaded state of the brain. At other times he thinks the brain appears to be influenced by a distant irritation either in the uterus or digestive apparatus.

Concerning the causes, there would seem to be more harmony, though still a few differ widely. Thus Braun, Frerichs, etc., of the uræmic school, regard albuminuria as always a concomitant. Frerichs says he has found œdema already present in the third month, though more frequently it is first observed in the last four months. The more pregnancy advances, the more the albumen in the urine increases, but disappears quickly after labor, sometimes within a few days, unless the exudative process in the kidneys makes further progress, and assumes the condition of chronic Bright's disease. But dropsical swellings are not necessarily connected with albuminuria.

"In regard to uræmic intoxication, Frerichs has been led," says Braun, "by a series of carefully performed experiments, to conclusions which he (Braun) found confirmed in the cases of several pregnant women who suffered with eclampsia and acute Bright's disease." These experiments were thought by Frerichs to determine that puerperal convulsions are produced by the breaking up of the urea in the blood, and the development of carbonate of ammonia out of its elements by the action of some unknown ferment present in that fluid. Hence he reasons that the uræmic convulsions do not only originate from the blood being poisoned by urea, but by this conversion into the carbonate of ammonia.

Scanzoni regards it as going too far to pretend that albuminuria is always present when we have eclampsia, and thinks in many cases uræmia is not sufficient alone to account for the phenomena, and there must be another cause in the brain and spinal marrow. He looks to peripheral irritation of the nerves of sensation, and irradiation or reflection of this on the motor nerves, and believes cerebral irritation could extend itself to the spinal column; and in truth the renal degeneration of Bright might act on the nerve centers, and become an important cause of eclampsia.

Cazeaux considers that since albuminuria is present in the great majority of eclampsic women, it or the disease of which it is a symptom may be regarded as the cause. He asserts that, with a very few exceptions, all such cases have albuminuria, though at the same time admitting that it may be present without the slightest symptom of eclampsia. Of forty-one women observed by Blot, who had albuminous urine, only seven had convulsions; and of twenty mentioned by MM. Devilliers and Regnault, eleven only were affected.

Cazeaux thinks one in four or five albuminous patients will be affected with convulsions. These facts and this proportion will not harmonize with what will shortly be offered.

In regard to the theory of Frerichs and Braun, it will not be out of place to show here the conclusions based upon the experiments of Dr. W. A. Hammond, U. S. A., made for the purpose of testing this theory of Frerichs. The report published in the *N. A. Med.-Chirurg Review*, March, 1858, says: "I conclude, therefore, from the foregoing experiments, that urea (simple and combined with vesical mucus) and carbonate of ammonia, when injected into the blood-vessels of sound animals, do not cause death. That urea, when introduced directly into the circulation, does not undergo conversion into carbonate of ammonia."

These are the very opposite of the conclusions arrived at by Frerichs by the same kind of experiments. Which is right? How much acute Bright's disease of the kidneys has to do with the production of, or how much it is merely a coincident with, puerperal convulsions or the true puerperal eclampsia of Braun and those of the uræmic schools, is a matter of the most intense interest; yet with all its intensity of interest it is not half determined. This phase of the subject is worthy of the most searching investigation, the closest scrutiny, and the greatest degree of reflection. While upon it hinges, if it be true, the most important of all treatment, the prophylactic or preventive, the curative can not be otherwise than vastly influenced by it.

Dr. Nebinger hoped that the members, in view of this important point in the consideration of the question, would not fail to give all the facts they might have touching it, intimately or remotely, and that they would indulge in the freest interchange of opinion. There being no portion of the subject more debatable than this, he hoped it would at this meeting be submitted to the severest mental tests.

Is Bright's disease of the kidneys a different disorder in puerperal women from what it is in all others? Is the disorder changed, modified, or

exalted by pregnancy? Is there during pregnancy some peculiar irritability of the cerebro-spinal nerve centers—peculiar, because depending upon the changes going on in the generative system — which makes puerperal women liable to be influenced by retained urea, in such manner as all others are not? If so, who will give the rationale of that irritable condition of the nerve centers? If Bright's disease of the kidneys, coexisting with pregnancy, not only begets a liability to eclampsia, but develops that condition, it was very clear to his mind that there must be in the puerperal woman some peculiar susceptibility to the poisonous influence of urea, depending upon her puerperal condition; and that this condition may be said never to exist unless as an accompaniment of, or as a component part of, the puerperal state. That eclampsia is not a constant symptom or phenomenon of Bright's disease, or of albuminuria in the non-puerperal, cannot be denied; that convulsions, of rather a safe character than otherwise, do occasionally present in the progress of albuminuria, is true, but so seldom indeed that they are not the rule, but its exception.* Can then a disease which occurs in pregnancy and parturition, and which has accompanying it a phenomenon, which it might be said but rarely accompanies it in other conditions, have that phenomenon fairly, reasonably, and analogically set down as belonging to it; as being produced by it; as being, in short, its fruit, when such fruit is not regarded as peculiar to it under other circumstances? Or, might it not be more logical to declare that the two conditions, the fit and the albuminuria, are mere coincidents? He expressed no opinion, but only threw out these interrogatories to invite debate.

Churchill says Hamilton and Damuet first stated that puerperal convulsions were liable to be preceded by anasarca. Dr. Simpson and Dr. Lever were the first to connect this dropsy with albuminuria. Dr. Blot found albumen in the urine of 41 pregnant women, out of 205, and chiefly in primiparæ. Dr. Litzman examined the urine of 132 females, 79 during pregnancy, 80 during labor, and 80 after labor; albumen was present in 37, and absent in 95; of the 37, 26 were primiparæ. It is a fact fully established by the collected statistics, as it is patent to every practitioner of midwifery, that primiparæ are more liable to convulsions than others. Indeed, this is so far true, that there may be said to be a very great exemption in all other than the first pregnancy, to attacks of eclampsia. Of 37 cases reported by Dr. Litzman, of those whose urine contained albumen, 26, or nearly ¾ were first pregnancies. What is the connection between first pregnancies and the presence of albumen in the urine? To his mind, said Dr. N., it was clear that the compression of the emulgent arteries by the gravid uterus, pressed upon by the resisting parietes of the abdomen, is chiefly the cause of albuminuria in first pregnancies—this abdominal muscular resistance being greater in the first than all subsequent pregnancies. But the question here presents, why are primiparæ more liable to convulsions than others? Of 198 cases of convulsions reported by various authors, 159 occurred in first pregnancies; leaving the remainder of 39 only, to be accounted to other pregnancies. These figures are significant. They establish an important fact. Who will give its solution? Who will wipe away the mystery which surrounds it? Upon what does this great excess of convulsion in primiparæ depend? Can any explanation be found in the fact that the sur-nervous excitability of pregnant women spoken of by Dr. Meigs is much more exalted in first pregnancies than in others, and hence more readily disturbed by retained urea in the blood, or by the carbonate of ammonia produced by its decomposition, as declared by Frerichs and Braun, but which Dr. Hammond thinks he has disproved? or is that excitability heightened by some other cause, as disturbance of the digestive apparatus, disease of the nervous or muscular structure of the womb, cerebral congestion, labor-pains, or any of the various causes to which the convulsions have been attributed—*no one of them being the* SOLE *cause*, but A cause only of the eclampsia?

That the excitement in the nerve centers interested in the production of the phenomena of parturition, and the irritability of the uterus at the time of labor, are much greater in first accouchments than in all others, might readily be inferred. May not these conditions have much to do with the creation of the fact of the excess of eclampsia in primiparæ? That the action of or the excitement in the uterus during labor has much, very much to do in many instances in influencing the development and continuation of the fits, seems to be shadowed, if not proved: 1. By attacks of eclampsia being almost universally aggravated by the pains of labor. 2. By the fact that even when a remission of the fits has taken place, they will be renewed by the return of the pains. 3. By the fact that the expulsion of the contents of the womb is generally followed by a cessation of the convulsion, and a restoration of the patient in a short season to consciousness. So great an influence indeed has the expulsion of the fœtus in controlling the convulsion that all the authorities recommend to be practiced any or all of the various means usually had recourse to, for the purpose of dilating the os uteri, accelerating the labor, and of bringing it to a speedy close, with a view to arrest the fits. Admit then the greater degree of excitement in the uterine nerve centers, and the greater degree of irritability of the nervous and muscular structure of the uterus in primiparæ, then add to this the greater disturbance of the mental system, especially during the accouchment, and perhaps we will have fixed upon the first and great cause, the predisposing; this point gained, the next to be reached is the exciting cause or causes. That Bright's disease

* In 33 cases of Bright's disease mentioned by Dr. C. D. Meigs, there were only 5 cases of convulsions.

of the kidneys cannot be THE cause, the only cause, as Braun and Frerichs assert, would seem to be proved by Braun himself, by his report of his post-mortem examination of 12 cases of puerperal convulsion, in only 7 of which was Bright's disease found, the remaining 5 not exhibiting that disease. That Bright's disease cannot be the only cause, is further established by the examinations of Scanzoni, who declares that he was able to discover in one case only *traces* of exudative nephritis.

Pathological investigations reveal little that is satisfactory. The brain exhibits much diversity of appearance. Some cases present nothing abnormal; in others, serum has been found effused on the surface and in the ventricles. In others, we have softening. Braun says the brain is most frequently anæmic and of diminished consistence. Hyperæmia of the membranes is frequent. In the lungs, œdema is constantly found, and sometimes emphysema. In the kidneys, we have constantly one or other of the three forms of Bright's disease. Blood effused upon the surface of the brain has been regarded rather as a result than a cause; which is suggestive of treatment to prevent such effusion.

Few diseases of a non-malignant type are more fatal, as is evidenced by the mortality statistics. Churchill's table, compiled from 20 authors, shows 328 cases, with 70 deaths. Braun 45, with 15 deaths. Lee 48, deaths 16.

Nor are they less destructive to the fœtus. The liability of the child is greater in proportion to the continuance of the convulsions.

Scanzoni has seen this malady twice in the ninth month before labor-pains came on; 23 times during labor, and 3 times after delivery. This experience will most probably harmonize with that of the majority of accoucheurs.

When convulsions occur before labor, they are extremely liable to provoke it, and this liability is increased by the advanced degree of the gestation.

The most interesting part of the subject, the treatment, is next to be considered.

Except the Germans, who believe in uræmia as the only cause, nearly all recommend free and decided general and local bleedings; the emptying of the stomach if it contain ingesta; the evacuation of the bowels by enemata and brisk cathartics; cold to the head in the form of the douche and ice cap; and sinapisms and blisters to the thighs and calves of the legs. Chloroform has been advocated and condemned. Braun reports 16 cases in succession, successfully treated by chloroform and acids. He chiefly depends upon anæsthesia, and either benzoic, citric, or tartaric acid, for the purpose of exciting the kidneys to vigorous action, and the removal thus of the urea from the blood. Though thus successful on these occasions, it seems this author did not meet with a like degree of success afterward, as Krassnig reports 16 cases in 1857 and 1858 in Braun's Clinic, at Vienna, of which 9 died.

Simpson, Channing, Seyfert, and Scanzoni favor chloroform.

One of the opponents of this agent says: "Since the irruption into the quiet domain of obstetricy of the vast army of chloroformers and etherizers, there has arisen an increasing disposition to crush out all movements and tendencies to eclampsia, under the force of anæsthetics. Some regard the results as admirable and cheering. I, for my part, cannot adhere to this dogma, for I regard it but a dogmatic institution." (*Dr. C. D. Meigs.*)

Opium and ether are advocated and opposed. The former, however, is more generally commended. It is generally regarded as preferable after blood-letting and the emptying of the uterus. Braun, however, recommends the use of opium where blood-letting has not been practiced, and directs from 1 to 6 grains, or $\frac{1}{4}$ to 1 grain of acetate of morphia within six hours, and at the same time 20 to 30 drops of an anodyne injection. This he specially recommends where the chloroform and acids do not operate quickly and permanently enough, when the delivery has been effected and the fits continue. "My observations," says Braun, "completely agree with Kiwisch, Scanzoni, and others, in regard to the use of opium." He does injustice to Scanzoni by this deduction, for the latter says blood-letting, general and local, is indicated at all times when there exists a hyperæmia of the nerve centers.

A vein should be opened, when the patient is robust and plethoric, with a red face, an eye brilliant, the conjunctiva injected, the carotids beat violently, and there is fear of cerebral congestion. If the bleeding is not sufficient, he recommends the application of from 5 to 20 leeches (equal to from 25 to 100 American) to the mastoid processes, and ice to the head. Internally, narcotics, especially opium, after the expulsion of the child, if the convulsions continue; and this he advises to be pushed till profound sleep is induced. Dewees reports a fatal termination from the use of laudanum. Churchill quotes Collins in its favor. Ramsbotham cites many authorities against it, and he himself condemns it while the symptoms are urgent, and cautions practitioners in its use, even after delivery. Cazeaux declares it should be banished from the treatment. Colombat counsels reserve in its employment when there is cerebral congestion and stupor. Meigs advises it after free depletion, the evacuation of the bowels, and the application of revulsives to the limbs. He says a good dose ought to be given, as 40 drops of laudanum, or 20 of black drop, or 2 grains of the powdered opium, or 50 drops of laudanum as an injection.

The obstetric treatment is indorsed by all. It may be summed up as follows:—

Use every means to dilate the os uteri, so as to deliver. The womb should be emptied by encouraging contraction; the great indication is to empty the uterus, as this, as a general rule, is followed by very positive improvement in all the symptoms.

In conclusion, Dr. N. offered the following summary:—

1. That the nature of puerperal convulsions is yet undecided.

2. That the cause or causes are undetermined.

3. That uræmia as the *only* cause is not only doubted but denied, if not disproved.

4. That the dependence of the convulsion upon the retained urea in the blood, being by some supposed ferment converted into carbonate of ammonia, is at best but a hypothesis, whose truthfulness is strongly disproved by the experiments of Dr. W. A. Hammond; experiments precisely similar to those performed by Frerichs, upon which he reared his carbonate of ammonia doctrine.

5. That post-mortem revelations are unsatisfactory, and at best present but little that is positive in regard to the pathology of puerperal convulsions.

6. That in reference to the treatment, the almost universal testimony is in favor of reasonable depletion, general and local; that the use of chloroform and opiates as remedies are each both strongly recommended and almost as strongly denounced; and that the obstetrical treatment, the speedy and prompt emptying of the uterus is the only portion of the management of puerperal eclampsia which is universally agreed upon, as proper.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

REMARKABLE CASE OF RECOVERY FROM DROWNING.

In the *Boston Medical and Surgical Journal* for September 5th, Dr. Alfred C. Garratt reports a very interesting and remarkable case of recovery from drowning, in which Faradaism and electro-puncture were the principal agents employed. The case is well worthy of being quoted entire, but our limited space will not admit of it.

It is stated that the patient had been immersed for *twenty* or *thirty* minutes—"some verily believing it was an *hour*." The body was cold, and apparently lifeless. The stomach was emptied of water by means of a pump, artificial respiration was attempted and persevered in, and friction with hot cloths, and squeezing and kneading the muscles everywhere was simultaneously carried on by resolute and willing hands. Next, by means of a magneto-electric machine, the application of electricity was commenced with in earnest.

"The machine was put at work at greatest power. The metallic electrodes, covered for the time with bits of wet rag, were applied, the positive to the back of the neck, while the other was at first glided along over the shoulder to the side of the neck, over the pectoral, serratus, and other chest-muscles, first on the left side and then on the right; changing back and forth, say every minute, changing the direction of the current occasionally; also changing the site of the electrodes, bringing the upper or positive one to the side of the neck and over the pneumogastric nerve, then to the brachial plexus, then over the trapezius and cervical spine, back and forth, at the same time sweeping the negative along the lower third of the pectorals and about the whole waist. The current was thus used most powerfully one minute as *direct*, and the next minute as *inverse*, and this was continued for one hour."

These efforts were continued with redoubled energy, and with many variations as to the direction of the currents, for half an hour longer.

"At this juncture I resolved to resort to electro-puncture: not primary galvanic, but suitable, or at least admissible, for such a case. Long gold electro-puncture needles, well insulated except their points, four in number, and four inches in length each, were carefully inserted in quick succession, some two or three inches apart, along the front sides of the chest, two in the lower part of each pectoral, plunging them inward and downward between the fifth and sixth ribs, their whole length, thus transfixing the pectoral, intercostal, and diaphram muscles, embracing the external nerves, also the solar plexus and the phrenic nerve branches. The introduction of the needles made no visible impression, but the instant the electrodes were now removed from the skin and brought only in contact with the ball-heads of the needles, (or the coupling chain of each two,) so that the electric current actually traversed the diaphragm from the points of one pair of needles on one side to those in the other, there was produced at each contact, *i.e.* after a delay of some five seconds or so, most manifest respirations, to the infinite delight of all present, for this was the *argumentum ad hominem*."

These efforts were continued, with some variations, for another hour, during which time the sighing gradually became deeper and more like a natural inspiration.

"In the course of the next half hour the heart-beats became very apparent, and soon the pulse was found at the wrist. The respirations were now partially self-induced, and occurred even when the electrode was occasionally withheld."

From this time the current was reduced one-half, and the patient was able now to swallow a little hot brandy and water when poured into his

mouth. At the end of ten hours, "the man became sensible, could speak, see, and take nourishment."

The points of interest in this case are the length of time the man had been submerged, and the hours longer that the lungs and heart refused to respond to the powerful means employed. It is true that cases have been reported of recovery after submersion for one-half or three-quarters of an hour, but they are not well authenticated—in fact, are believed by the profession to be utterly fabulous. The longest time of submersion, after which recovery has taken place, that is well authenticated, that we now remember, is *fourteen* minutes. The case is reported in the *London Medical Gazette* for December 23d, 1842. In that case restorative means were used for eight hours before respiration was re-established. The case reported by Dr. Garratt we hope may stimulate to more thorough and prolonged efforts at restoration, in cases of apparent death from drowning, and it is probable that the persevering and skillful use of electricity may yet be found capable of saving many valuable lives, under such circumstances, that otherwise would have been lost.

Will a man live longer immersed in warm or cold water, is an interesting question. Dr. Garratt's patient was immersed in ice cold water. We have some remarks touching this subject, in the Reporter for July 27th, and Professor W. H. Thayer, of Keene, N. H., has a very interesting article upon the treatment of asphyxia, in the April number of the *Berkshire Medical Journal.*

DIPHTHERIA.

In the *Ohio Medical and Surgical Journal* for August, our old acquaintance and friend, Dr. E. L. Plympton, of Centreville, Ohio, has an article upon diphtheria, from which we make an extract or two, and upon which we propose to base a remark. (We would say here that we did not see our friend's article where it originally appeared, but read it in the *St. Louis Medical and Surgical Journal.* The *Ohio Medical and Surgical Journal* has perseveringly refused to come to our sanctum and contribute its quota to our *summary.* In the number of the *St. Louis Med. and Surg. Journal* now before us, an article from our *summary,* in the Reporter for July 6th, upon "Cystorrhœa *vs.* Matrimony," is copied entire, and credited to the *Ohio Med. and Surg. Journal!* Refusing to contribute to our *summary,* has the *Ohio Journal* stolen from the same and appropriated to itself, or has the *St. Louis Journal* erred in its credit?) Upon former occasions we have given our opinions upon and experience in this disease, and shall not, at present, inflict a lengthy article upon our readers, however important may be the subject.

Dr. Plympton's experience early led him to the following conclusions:—

"1st. That diphtheria is as much a blood disease as small-pox. 2d. That it should be treated with such hematic remedies as have a tendency to correct this morbid condition. 3d. That the treatment, to be effective, must be commenced either before or early in the active stage of the disease, and that it is useless to waste much time or trouble in treating the local affection of the throat. Acting upon these conclusions, I have, in every case, placed my principal reliance upon some combination of chlorine, and mainly upon the chlorate of potash, commencing usually with a mild mercurial cathartic, oftener using the hyd. c. creta than any other. To a child five years of age, I give enough of the saturated solution of the chlorate to contain three or four grains, and repeat the dose every three hours during the career of the disease; and to patients older or younger, in relative proportions. When the child is capable of gargling, I have him use one mouthful as a gargle, for the purpose of washing out the loose excretions of the throat, and then immediately swallow the prescribed dose. I have repeatedly penciled the throat with the nitrate of silver and tincture of iodine without any very satisfactory results."

In regard to removing the exudative membranes our opinions have been previously expressed; and, though we differ in this regard with most authorities, we find support in our friend's opinion. He says:—

"I can see no more philosophy in removing the membranous exudation with the expectation of mitigating or cutting short the disease, than I can in removing the pustules of variola with the expectation of safely terminating that disease. The one is as much an element of systemic disease as the other. If the diphtherial exudation be in the air-passages below the epiglottis, the caustic swab will stand a poor chance of removing it in season to save the patient; if the exudation be above, it will not be much in the way of his recovery."

This opinion is almost exactly what we have expressed on a former occasion.

At the head of all remedial agents in diphtheria, Dr. Plympton places the chlorate of potash, and he says:—

"I not only have faith in it as a *curative* remedy, but as a *prophylactic.*"

Bearing upon the subject of its prophylactic

powers, we will quote an idea from Dr. S. H. Smith, of New York. In the *American Medical Times*, for June 8th, speaking of the chlorate of potash in *typhoid fever*, he says :—

"I have settled down into the conviction that its greatest value in such cases is as a prophylactic. Given in conjunction with quinine and mild aperients, I have seen it repeatedly stave off attacks of fever during epidemics, even of 'Irish emigrant' or 'ship' fever; the premature laying aside of the medicine being followed by immediate return of the threatening symptoms, again to be dispersed by a recurrence to its use."

We are inclined to attribute the prophylactic powers of this combination largely to the quinine, yet we give the opinion of Dr. Smith as it stands. It must be admitted that there are some points of strong resemblance between typhoid fever and diphtheria.

We have used the chlorate of potash in every case of diphtheria that has come under our observation, and we must say we are not satisfied as to its curative properties. Certain are we, that we have never lost a case in which the chlorate of potash was not liberally used from the beginning. Though it may be a valuable remedy, *it is not capable of saving all cases*, even when aided and supported by other appropriate remedies.

Our readers may remember that in the Reporter for September 14th we referred to the opinions of Dr. N. E. Jones, of Circleville, Ohio, as published in the *St. Louis Medical and Surgical Journal* for May. He regards belladonna as a valuable remedy in diphtheria, and gives the following as his conclusions :—

"1st. Belladonna given to intoxication arrests membranous exudation.

"2d. Given early in the febrile stage, cures by resolution.

"3d. Causes softening and detachment of exudation in an unusually short space of time."

Upon this point, in the *St. Louis Medical and Surgical Journal* for July, Dr. E. W. White remarked :—

"Exudations are respectively euplastic, cacoplastic, or aplastic. In the case of croup, the formation may be plastic, highly fibrinous; in scarlatina, almost entirely aplastic, sero-albuminous, and tending to putrefaction. Diphtheria appears to rank between the two, the effusion being either fibrinous, when the attack is acute and sthenic, or fibro-albuminoid; or, indeed, if slow, insidious, and asthenic in its approach, the effusion may be sero-albuminoid. Now, we cannot understand how belladonna can exert any beneficial effect in such diphtheria, where all antiphlogistics or sedatives are injurious. *We need stimulants from the beginning.* If it be true that malignant diphtheria, scarlatina, and croup are blood diseases, a narcotic is certainly not indicated—alteratives are needed. *I think iodide of potassium has probably the highest claim.* It has always been used with benefit in the sloughing, mercurial sore-throat, a condition almost identical with that of diphtheritic ulceration. Mercury would be, for this reason, a bad remedy, especially after the acute stage had passed. Iron and alkalies are the great constitutional means. Diphtheria is a true blood disease, and I would use stimulants to elevate the nervous power, while I would use alteratives and tonics to cure the blood disease. It would appear, therefore, irrational empyricism to administer belladonna *'to intoxication'* in these diseases."

Of belladonna in diphtheria we cannot speak favorably; and, though the chlorate of potash may be a valuable remedy, there are many cases to which it is not adequate to the cure.

Our brother-in-law, Dr. L. V. Axtell, of Jamestown, N. Y., whose experience is quite large in this disease, speaks very highly of *arsenic* in diphtheria. In adults, he would give *Fowler's solution* in ten-drop doses, and repeat every *four* or *six* hours during the disease. He says the proportion of deaths to his whole number of cases has been greatly diminished since he commenced the administration of this remedy. He also believes that the fetor of the breath has been greatly diminished under this kind of medication. It is proper to observe that he has not neglected ordinary instrumentalities—quinine, iron, chlorate of potash, etc. have been used as heretofore.

Theoretically, we should expect benefit from it. A remedy so powerfully antiseptic, and tonic besides, should be of service in a disease so strongly septic as is diphtheria in its severer forms, as well as in some other difficulties of a similar character.

We have used the remedy in our last ten cases, and we were rapidly acquiring a favorable opinion of it, when we suddenly lost two cases, both in one day. They were, however, terrible cases, septic to the last degree, and it was probably no fault of the medicine that the patients died. In so severe a disease as diphtheria, it is not probable that a specific will be found. Dr. Axtell and his partner have great confidence in arsenic, and we certainly hope much from it. In this locality, a type of the disease has prevailed more putrid in its tendencies and rapidly gangrenous than any we have seen described in all our reading. It has been our good fortune to lose but one in

ten. In view of all the circumstances, we think this speaks well for the remedies employed. When we hear of physicians having hundreds of cases, and losing none—using only simple remedies—we know they have not seen the disease at all, or at least not in its severer forms.

Dr. White, of St. Louis, suggests the *iodide of potassium* as probably the most important alterative in diphtheria. We remember having seen the same suggestion before, but do not now call to mind by whom it was made. We have never given this article a trial in this disease, and can say nothing experimentally.

MALDIRECTION OF THE AXIS OF UTERINE CONTRACTIONS IN LABOR—RECTIFICATION OF.

In the *St. Louis Medical and Surgical Journal* for July, Dr. M. M. Pallen makes the following remarks upon the above subject:—

"Sometimes in primipara we find the neck of the womb high up and back toward the sacrum, with os but slightly dilated and the anterior lip projecting. I had a case of this kind a week ago. The plan I employ to remedy this is to pass the finger into the mouth of the womb, and gently pull it down anteriorly, thus making the head of the fœtus bear more directly upon the os uteri, which generally hastens labor. I have used this method successfully for some time, and recently saw it recommended in the *London Lancet*."

We have practiced this method for several years, and, at least on two occasions, advocated it in print. It is frequently the case that, though the pains be severe, the os uteri does not readily dilate; the uterine axis is not on a line with the pelvic strait, and hence the os does not descend or dilate readily before the force of the pains. On the contrary, the os presses against the sacrum, and the pains are resisted. Under such circumstances the labor can be much shortened, and much suffering prevented, by bringing the os forward and downward into the pelvic channel, as above described. We always do this during a pain.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, DECEMBER 14, 1861.

THE DEATH OF SIR JOHN FORBES.

Among the many illustrious names recorded upon the pages of mortality in our own and foreign countries during the past six months, none perhaps stands out more prominent than that of Sir John Forbes, M.D., D.C.S., Oxon., England. His history covers a period which may not be inappropriately denominated as the twilight, the rising sun, the zenith of medicine, extending over more than half a century; a period during which most important discoveries have been made, and which has been characterized by remarkable progress in medical science.

Sir John Forbes was born October 18, 1787, and died November 13, 1861, in the seventy-fifth year of his age; but this brief record gives no clew to the toils and successes of his long, laborious, and useful life. In 1805 he entered Marischal College; in 1806 he spent a session at Edinburgh University, and in 1807 he entered the navy as assistant surgeon. At the end of twenty months he was promoted to be surgeon, and continued in active service until 1816. His early promotion was a reward for a report on the Meteorology of the West India Station. During the intervals of public service he returned to Edinburgh for the purpose of attending both medical and scientific lectures, and in 1817 graduated as doctor in medicine. He commenced the practice of medicine at Penzance, and at the same time devoted himself with zeal to scientific pursuits, but more particularly to the study of geology and climatology. In 1820 he was married, and in 1823 removed with his family to Chichester, where his only son (Alexander) was born in 1824, and where he had a large practice and was an active supporter of all the local charitable and literary institutions. Here he delivered two lectures before the Philosophical Society, (which were published,) and was mainly instrumental in establishing an infirmary. It was here that he meditated and launched the two great enterprises of his life, the "Cyclopedia of Practical Medicine" and the "British and Foreign Medical Review." The former was completed in 1835, and was justly characterized by himself "as marking an epoch in the medical literary history of this country." It was the first attempt at "giving to the world the actual state of our knowledge in that particular branch," medicine. The latter, after having contributed for twelve years most largely to advance the science and art of medicine, keenly and successfully combated many of the errors and abuses which had warped the judgments and opinions of medical authorities, was terminated in 1847.

In 1831 he published the first edition of Laennec's "Treatise on Auscultation and Diseases of the Chest," and first introduced the doctrines and

art of physical diagnosis into England. This method of diagnosticating pulmonary and cardiac diseases was received with contemptuous disregard by many of the physicians of England, as it was at a later period in this country; but as its advantages to practical medicine became more clear and evident, a fifth edition of the same work was required in 1838. In 1833 he published his "Original Cases Illustrating the Use of the Stethoscope, with a Translation of Auenbrugger," which gave a fresh impulse to the auscultatory art. In 1846 he published "Homœopathy, Allopathy, and Young Physic," which, on account of its "denunciations of the system of pouring in drugs, and because he fearlessly sought truth from any source, and therefore did not despise the little that could be learned from the errors of homœopathy," was unpopular with many of the profession, and raised a great outcry against him. But "he took his stand on what was needed for the elevation of the profession not for the flattery of it, hoping that the *Review* (in which this article was first published) might itself cure the evil from which it was meanwhile to suffer." He stood in the position of a reformer in medicine, a character which not in medicine alone but always elsewhere draws upon itself peculiar notoriety, not to say odium. In 1857 his "Nature and Art in the Cure of Disease" was published as a "legacy" to his "younger brethren." In this work he gives a full and systematic exposition of his medical doctrines, and brings out into complete utterance the natural history of diseases only faintly indicated by the great Sydenham. He lived to see a more enlightened method of treatment in regard to drugs prevail to some extent among the profession, and contemplated its results, no doubt, in his retirement, with feelings of unmingled satisfaction.

He was naturally somewhat skeptical, and was always ready to receive and examine any new thing which promised progress. Hence he gave a modified support to phrenology; cordially advocated abstinence from fermented liquors as a general rule; carefully considered and exposed the tricks of mesmerism, and gave to all questions of medical reform his earnest attention. The same ardent desire to promote the welfare of the profession stimulated him also to establish and advance the Sydenham Society, by which the labors of leading authors in medicine, both ancient and modern, are placed within the reach of the profession at a small comparative cost.

Nor did he limit his labors to mere professional studies. He ranged also the fields of general science and literature, and was a constant attendant upon the meetings of the Royal Society and Royal Institution, on the council and committee of which he frequently served. His "Physician's Holiday, or a Month's Tour in Switzerland," published in 1849, is pervaded by so genial and healthy a tone that the most stolid could not fail to be interested, instructed, and charmed by its perusal. Occupying a position at once influential and authoritative, it was hardly to be expected that he could pass through life without exciting animosities in divers and numerous quarters. If he had any defects or infirmities in his public life, let the narrow house, which now incloses his remains, hide them from the prying gaze.

In private life Dr. Forbes was a man to be both loved and honored, though he professed, perhaps, too little of the Christian faith. "Do as you would be done by" was the daily rule of his life, and was manifested in acts of overflowing benevolence. He sympathized with the young practitioner in his early struggles, and was ever ready to lend a helping hand to any who were struggling with penury for patronage. He took an active interest in every medical benevolent institution, and his sympathies extended even far beyond professional circles.

For the last three years the state of his health compelled him to retire altogether from practice. Symptoms of structural disease at the base of the brain, causing vertigo, imperfect consciousness of objects and places, were the commencement of the illness which finally terminated in complete paraplegia for three months before his death.

"Whatever," says the *Times and Gazette*, from which we condense the foregoing, "may be now thought of his merits, it is certain, we think, that the more his character and labors are known, the higher will his rank be in the roll of fame. Taking him in all his relations, as a scholar, at once scientific and accomplished; as a physician, deeply read, learned, and practical; as a man of his art, never wearying in his efforts to advance the social, material, and technical interests of his profession, it will not be easy to name his equal in each and all."

A MEDICAL ANNUITY FUND.

There is no class in the community in which the advantages of an annuity fund is more needed, and would be more appreciated, than in the med-

ical profession. Medical men are not particularly inclined to improvidence in anticipating the exigencies which may befall themselves or families, but there are many circumstances which often prevent them from so providing.

A lucrative professional income, from which good provision for the future could be provided, is not often secured early in life; and the professional man does not, indeed, usually commence his pursuit until a period when men in most other occupations are making for themselves a subsistence. From many causes, the pecuniary income of practitioners is precarious. The occupation is not a healthful one, and the average duration of life of medical men is shorter than that of those engaged in the other liberal professions. The average amount of income of individuals in the entire profession in this country is not such as that, with even rigid economy, permanent provision for the support of a family could be insured after, through any calamity, its source had failed.

As the community do not remunerate physicians so that they can always provide for contingencies, it remains alone for the members of the profession to unite with this object. In one of the medical societies of this city, a few years ago, a movement in favor of establishing some kind of organization by which relief could be extended to those of our brethren who, by being superannuated or by loss of health, are incapable of self-support, and to the families of those by whose death they are left to suffer from want, was made, which at the time appeared to excite some sympathy. It finally died of apathy, and since then has not been revived.

The subject, although often in our mind, has been again particularly impressed by an earnest address on it in the *British-American Medical Journal*. We are aware of the existence of but two organizations with such objects,—one is a flourishing institution, of the character of a beneficial society, in the City of Boston, the other in the City of New York.

In a number of instances, respectable but unfortunate practitioners have been compelled to appeal to individual members of the profession for immediate relief from destitution, and it is not unknown to many in the profession, that a gentleman, who was for many years a practitioner in this city, who is bowed with infirmities and wears the frosted crown of age, is now an inmate of the Philadelphia Almshouse.

The address above alluded to, says:—

"It has been my painful lot, during a long professional career, to see the dying moments of more than one generous and noble-minded professional brother, who had sacrificed his life in the service of suffering humanity, embittered by the agonizing reflection that the wife of his bosom and a beloved and helpless family would be left to the neglect and pity of a cold, calculating world."

A project for an annuity fund needs but a start by those in whom the profession have confidence, to gain a general approbation and support. Wealth is very unequally divided among practitioners, and those who, in their plenitude, are blessed with a philanthropic spirit, would soon create a substantial basis for a fund, from which their unfortunate brethren could be relieved. The powerful though silent influence of the profession on the public could also be brought to bear toward increasing such a fund. The present time, so illustrative of the precariousness of human pursuits, would not be inappropriate for the founding of an institution of the character proposed.

EDITORIAL NOTES AND COMMENTS.

Announcement.—We are pleased to announce that arrangements are now completed by which the Reporter will hereafter be issued regularly and promptly. The delays and irregularities which have attended its publication heretofore have been exceedingly annoying to ourselves, as we know they have been to subscribers. With the present number the name of the long and well-known publishing house of J. B. Lippincott & Co. appears upon the Reporter as printers, which will be a full guarantee for promptness and regularity in its publication. We congratulate ourselves and subscribers upon the change. This arrangement involves no change in the well-known principles upon which the Reporter has heretofore been conducted.

In this week's Reporter, we commence the publication of two important articles, both of which will run through several numbers. The first is an article from Dr. Geo. K. Smith of New York, on *Intra-capsular Fractures of the Femur*, which will prove to be a most valuable contribution to surgical science. Several wood-cuts will illustrate it. The second is a full report of Lectures (illustrated) now in progress of delivery at the Brooklyn Surgical Institute, by Dr. Louis Bauer, which, as a new theme for a course of

lectures, will attract the attention of the profession. These articles will form an excellent point at which to commence subscriptions.

Dr. Marion Sims in Paris.—This excellent surgeon has lately performed several successful operations for vesico-vaginal fistula, in presence of the leading members of the faculty of Paris: one at the Hôpital La Charité, for that eminent obstetrician and surgeon, M. Velpeau, another a private patient of M. Nélaton. The latter was an interesting young woman of twenty-two years of age, the daughter of a countess of the old *régime* of France, who, during the act of parturition, suffered one of those terrible accidents (which, happily, seldom occur) by which the walls of the vagina were so far destroyed that reparation was declared impossible by the best surgeons of Paris. When Dr. Sims first saw her, he, too, thought the case hopeless, but subsequent visits, and after making many drawings and calculations, the operation was finally decided upon as possible and practicable. The operation was a tedious and delicate one, but was completely successful. During its progress she came very near dying from the effects of the chloroform, which she insisted upon taking. For an hour the operation was arrested by efforts to bring back the life which seemed to have fled forever, and it was only by the intelligent and persevering efforts of M. Nélaton, who directed them, that a fatal result was prevented. The plan he followed being somewhat unique, we give in detail. It consisted in throwing the head down and the feet in the air, at an angle of about forty-five degrees. By this maneuver, the brain and heart, with an increased quantity receive an increased amount of stimulus from the blood, and life is preserved until the volatile poison has spent its force and is dissipated. While the body was thus held, frictions and artificial respiration were resorted to, a piece of cork was placed between the teeth, and, when necessary, the tongue held from the mouth by means of a hook.

Podophyllin as a Substitute for Mercury.—This article, the active principle of the *podophyllum peltatum, May apple*, or *mandrake*, is just now coming into notice among our transatlantic neighbors, as a substitute for mercury. The suggestion of its use came, however, it is said, from an American oculist, who, in 1854, when about to leave the English shores, placed his daughters under the care of a celebrated physician, and gave the latter a bottle of this remedy, which he requested should be prescribed instead of mercury, whenever a mercurial was required in their case. Following this suggestion, the physician has used it continually since, and thus speaks of its administration and effects. If given in quarter-grain doses, twice a day, combined with opium, to check its aperient action, and continued for a few days, profuse salivation will occur, with, however, [no?] fetor of breath, or ulceration of gums. This, however, rapidly subsides on discontinuing the medicine. It is very slow in its action, often ten or twelve hours, but in the following combination induces one or two copious stools, attended with the sensation of the bowels having been thoroughly emptied, and without tenesmus:—

℞.—Podophyllin, gr. j;
Pulv. Rhei, gr. ix;
" Capsici, gr. ij. M.
Ft. pil. iij. S. one or two.

This for an ordinary aperient. Its action on the liver, if given in small doses, may be as much relied on as mercury, while the effects upon the system generally are, by far, less injurious.

An Indian Remedy for Variola.—This disease is the special plague of the Indians. When it breaks out among them it sweeps over their encamping grounds like the fire of the prairies, destroying all of human kind in its path. On one occasion, among the Indians near the City of Halifax, Nova Scotia, whole families were carried off by its ravages. After a time, however, the pestilence was stayed, and it was asserted that an old, weird Indian woman possessed a remedy, which would speedily and effectually cure any who were attacked with it, and that, coming into the camp, she had administered the preparation with infallible effect in every case. In the case of an individual suspected to be under the influence of the disease, but with no distinct eruption, a large wineglassful of the infusion of the root of the "*sarracinia purpurea*," or pitcher plant, is to be taken. This brings out the eruption. A second or third dose, given at intervals of four or six hours, causes the pustules to subside, apparently losing their vitality. The patient feels better at once, and, to use the graphic expression of the "Micmac," "knows there is a great change within him at once." If the patient be already covered with the eruption, in the early stage, a dose

or two will dissipate the pustules, and subdue the febrile symptoms. The urine, from being scanty and high colored, becomes pale and abundant; while, from the first dose, the feelings of the patient assure him that the "medicine is killing the disease." In three or four days the prominent symptoms of constitutional disturbance subside, and no marks of the eruption are left upon the skin. In the camps, when the remedy is used, a weak infusion of the plant is taken as a preventive, "to keep the antidote in the blood." So important is the knowledge of this plant thus obtained considered to be, that its anti-varioloid properties are to be tested in England. And it is most assuredly worthy the attention of the profession in this country. Vaccination is not infallibly certain as a preventive, and we have, as yet, no remedy which will cut short the ravages of the disease, or prevent it from leaving indelible marks upon all who are attacked with it.

Correspondence.

BOSTON CORRESPONDENCE.

Boston, *December 5th*, 1861.

The Suffolk District Medical Society, or that portion of the members of the Massachusetts Medical Society who reside in the County of Suffolk, has a very agreeable feature in its regulations—of combining with its monthly meetings, three or four times during the winter, a social entertainment, at which, after the discussion of various matters of professional and general interest, the fellows present go from labor to refreshment in the most approved manner. This practice has been in vogue for the past four or five years, and experience so far is entirely in its favor. Not only are the meetings better attended, but the sociality of the occasion tends to bring into closer acquaintance the members from various parts of the county, and in this way helps to do away with much of that professional jealousy and indifference to each other which very naturally prevails more or less where all are to a certain extent strangers to the majority of their professional brethren. Greetings are exchanged over a dish of hot oysters, and introduction takes place with the offer of a cup of smoking Mocha, and old friendships suffer not the least from the coolness imbibed in a modicum of ice cream. Whether this be a Boston notion, I know not; but that it is a very good notion, whoever originated it, I am ready to add my testimony and vote. The last meeting of the association was one of this kind, and there was a very general attendance of the members. There were a variety of subjects discussed in the meeting for business. The effect of tobacco in patients subject to hemoptysis was mentioned, and two or three cases instanced in which it appeared to act beneficially. A discussion upon the effect of this article upon the system generally ensued. Nothing new, however, was elicited, and indeed it is difficult to imagine any other result, when we remember the variety and extent of the numerous blasts and counterblasts that from time to time have been printed upon the subject. There was also a free interchange of opinion upon the proper course to pursue when a member of the society was called to perform surgical or obstetrical operations in families at the time under homœopathic jurisdiction. There was but one opinion as to the propriety of consultations with the men of the latter school, but on the part of some there appeared to be an opinion that in cases where the attending homœopathic physician could not carry the case to a successful termination, and additional help, or tact, or talent, or whatever you please to term it, was needed, there was no impropriety in any of the regulars taking up the job and the pay too. But, inasmuch as the whole subject was postponed for further consideration to another meeting, it would be premature to discuss the matter here. It is to be hoped, however, that the good sense of the profession will prompt to some course of united action, which will at the same time protect their own interests and serve the community at large.

Something is out of joint with the distributing arrangements of the Reporter in Boston. The numbers do not usually reach subscribers till nearly, and sometimes more than a week after their date of publication. Can't this be remedied? Trimount.

NEW YORK CORRESPONDENCE.

Non ut diu vivamus curandum est, sed ut satis.—Seneca.

At the last meeting of the New York Academy of Medicine, Dr. George T. Elliot opened the discussion relative to Professor Barker's eminently interesting essay on Anesthesia, etc. etc. Dr. Elliot went into the subject con amore, and gave forth to the members the result of a wide

experience in the lying-in room. The use of chloroform, especially when the case demanded the application of forceps, was strenuously urged and proven by a statement of incontrovertible facts. Dr. Barker's "Paper" was indorsed to the fullest extent, and the substance of the remarks made that evening was more surely to establish what had been said. The perusal of this production would repay any physician, and render more clear, in the minds of rural practitioners, the necessity of becoming familiar with ether and chloroform as agents of more assistance during the latter stages of labor than any three medical lights of surpassing effulgence. Dr. Griscom followed with additional information of practical purport. Dr. A. K. Gardner next stated his experience, which differed only slightly from the remarks of the preceding speakers. Another discussion will take place at the next meeting.

There is residing in this metropolis of busy minds a triplex man whose mental attributes are of the very highest order. Modest and unassuming, his lamp of learning burns, yet with the clearest luster, in the deep recesses of sequestered meditation and profoundest study. Ere the birth of many suns, his merits will be brought before the world, and, what can never fail to prove of lasting import, recognized by tardiest panphobiars.

Professor John Ordronaux, a learned lawyer, well read doctor and philosopher, of soundest ethics, is now lecturing before the law school of Columbia College, on that all-important branch of study designated Medical Jurisprudence. The perspicacity of his style is only to be equaled by the fullness of his data. While he quotes from ripest minds and cites the cases of the deepest interest, he reasons with the clearness of a crystal thought and dignifies the subject by the force of purest language. Each lecture forms a succinct and comprehensive treatment of a certain principle on trial; and, at the close of his apportioned hour, more aphorisms of a practical importance are condensed within a lucid space than may be found in the pages of the learned writers of the past. A free admittance is accorded those of the profession medical. And if good counsel might be given by one citizen to others, I would say, physicians, visit this recorder of the essence of law, and, after the consideration of some of those important stand-points that you may be called upon at any moment to defend, my word for it a second, fifth, and twentieth renewal would repay your presence and improve your tone of mind.

Professor Ordronaux has also written a book for the benefit of soldiers, entitled "Hints on the Preservation of Health in Armies," etc. New York: D. Appleton & Co. The best proof of its utility and kind reception is that not one copy can be purchased of the publishers, as the whole edition is exhausted. The main features in this product of an able man are—firstly, a freedom from any ambiguity of expression. The result of exposure is at once exhibited to the careless officer; while, on the other hand, he is instructed in all the necessary details of a camp existence as enforced by an obedience to the laws of self-preservation and economy of strength. Secondly, the matter is placed before the mind's eye in permanent shape. The best, readiest, and simplest method of keeping warm, avoiding an undue severity of dampening influences, and, above all, the judicious preparation of the food that forms not only muscles, bone, and blood, but all the nervous energy that stamps the hero and betrays no weakness. And, thirdly, by a careful reading of its pages, one is struck with the best use of the experience of European armies. Their sad failures are briefly exposed to view: their invaluable statistics are recorded, and the reasoning of uncommon common sense is brought to bear upon the safest method of indoctrinating all commissioned officers with the sure principles of innate health.

At a meeting of the Sanitary Association last Thursday evening, after the election of the officers for the ensuing year, Professor Ordronaux related his experience, while abroad, concerning hospitals, camps, and other hygienic regulations of no small moment to Americans, for the past year the dupes of base corruption and an all-deficient system of street cleaning. May the city fathers, who have for the last twelve months presided over our lives, be the subjects of as filthy minds as the back-handed contracts which gave — to our own existence, and a mighty + to their long pockets. Dr. Bell, of Brooklyn, then read an able and interesting paper on Vaccination, which combined the history and importance of it in the various conditions of a city's progress. It will be printed, and then read by many.

Gourmet.

NEWS AND MISCELLANY.

Egyptian Desert Sanitarium.—We notice, in the *Dublin Medical Press*, the advertisement of an establishment with the above title. It is said to be situated in the desert near Cairo, surrounded with grounds for exercise, and possesses other conveniences as a residence for invalids suffering with pulmonary complaints, who are said to be benefited by the pure air of the desert.

The Dublin Medical Press says that "the American army surgeons seem better than ours, judging by the contrast between Bull Run and the Crimea."

Death from Polysarcia.—The *Buffalo Medical and Surgical Journal* reports a death from polysarcia in the Utica City Hospital. The patient was a colored man, a cook, aged forty-one years. His height was five and a half feet, and weight *three hundred and fifty pounds*. His circumference was four feet ten inches. For fourteen years he had been obliged to be clothed in female apparel. The autopsy showed two inches of fat on the sternum and three inches on the abdomen. His breasts were as large as those of any female. The lungs were sound but very small; the left lung weighed twelve and a half ounces. The heart was large, weighing twenty-four ounces, but perfectly sound. The liver weighed five pounds. The kidneys each weighed twelve ounces. The spleen was small. The penis and testicles were not larger than they are usually found in boys of seven or eight years of age; the scrotum was one and a half inches thick.

Reduction in Cost of Medical Periodicals.—The proprietors of the London *Medical Times and Gazette* have decided to reduce the price of that journal, in consequence of the repeal of the paper duty. The reduction commences January 1, 1862.

Dr. Adams has been appointed surgeon-in-ordinary to the Queen in Ireland. The *Times* says there is no other living Irishman who has done more for surgical science.

The Hospital at Fortress Monroe.—Two hundred and eighty patients are now in this finely-arranged hospital, of whom one hundred are convalescent. But few of them are critical cases, upwards of one hundred being sick with measles. Of three hundred and fifty-five cases treated during November, thirteen deaths occurred, viz.: from typhoid fever, (which now seems to be staying its course,) eight; from inflammation of the brain, two; from gangrene of lungs, one; from consumption, one; from measles and inflammation of lungs, one. The officers of the hospital are: Brigade Surgeon, Reed B. Bontecou, in chief charge; Assistant Surgeons Joseph S. Smith and Charles B. White, U. S. A.

The editor of the Cincinnati Medical and Surgical News is preparing a list of *living* medical journals. We predict the list will not cover twenty pages of foolscap, nor a page of that journal, and we sincerely question whether he will be able to get beyond the digits in his compilation.

MARRIED.

Brooks—Beers.—In Fairfield, Conn., on Tuesday, Dec. 10, by Rev. Rufus Emery, Daniel Brooks, M.D., of Brooklyn, N. Y., and Mary, daughter of Capt. Abel Beers, of the former place.

Hoehling—Rudduck.—On the 21st Oct., by the Rev. Dr. Peter Van Pelt, Dr. Adolph A. Hoehling, United States Navy, to Miss Annie T. Rudduc , fourth daughter of William Rudduck, all of Philadelphia.

Osborne—Pyle.—On the 7th instant, in this city, by Friends' ceremony, in the presence of Aldermen Thompson and Martin, Wm. Osborne, M.D., to Mary H. Pyle, of Chester County.

DIED.

Parch.—In Hinesburgh, Vt., Dec. 9th, Dr. T. Parch, aged 71 years.

Answers to Correspondents.

Vaccine Virus.—Our supply of vaccine matter is exhausted; but the demand is increasing. A response from those who have received a supply from us, will enable us to respond to the requests of others.

Dr. J. W. B., Ill.—The Reporter for one year, and Physician's Hand-Book of Practice for 1862, will be sent to your address for $3 60, paid previous to January, 1862. The Hand-Book contains, in addition to the practical part, a Visiting List for some thirty patients, and sells at retail for $1 25 per copy. Subscribers to the Reporter get the book, therefore, for less than half what it will cost them if they buy it at the book stores. Or we will send you the Reporter and "Physician's Visiting List" for twenty-five patients, the retail price of which is 75 cents, for $3 40, paid within the same time. These terms are exceedingly liberal, and we hope will induce you not only to subscribe for the Reporter yourself, but to commend it to others. tf.

B. M.—We have seen two cases of chronic camp diarrhœa which, to all previous treatment, were intractable, entirely cured by arsenic. Fowler's solution, five drops four times a day, was given.

S. D.—The best suggestion which we have seen for preventing instruments from rusting, is to apply on them a solution of white wax in benzine. The benzine evaporates, leaving an exceedingly thin coating of wax, which is a perfect protection. If it be desired to remove the wax, it can readily be done by heating the instrument so as to melt the wax, and then wiping it off.

J. E. G.—Sylvester's method of restoring suspended animation consists in simply laying the patient on his back, and having pulled the tongue forward, draw the arms slowly up over the head, by which means the ribs are elevated by the pectoral muscles, and inspiration is produced; the arms are then to be brought down to the side of the chest, which they are to compress in a slight degree. These movements are to be repeated as slowly as in the Marshall Hall method.

W. J., Waltham, Mass.—The "Gastroscope" has not been introduced into this country. The locality of the instrument alluded to was Paris, and it is probable that it will not be introduced here until we have a "*stomach man*" among us. This will perhaps not occur until the "*uterus men*," now flourishing, have had their day.

Communications Received.

Indiana—Dr. W. P. Welborn, with encl. *Maine*—Drs. J. H. Jewett, C. T. Trafton, each with encl. *Massachusetts*—Dr. Marshall Calkins; Drs. T. Cutter, M. W. Kidder, D. B. Gage, John

Stow, each with encl.; Wm. F. Tewlon. *Michigan*—Dr. Chas. T. Southworth. *New Hampshire*—Drs. E. B. Hammond, O. A. Woodbury, C. H. Horch, C. H. Shackford, F. T. Tuttle, D. Drury, E. Jenness, A. H. Varney, Warner & Farrington, E. C. Dow, each with encl. *New Jersey*—Dr. A. A. Howell, with encl.; Dr. E. L. B. Wales, comn.; Dr. F. A. Cutter, Dr. Geo. F. Fort; Dr. J. B. Somers, with encl. *New York*—Dr. O. C. Gibbs, Dr. S. W. Francis (2), W. A. Townsend, Dr. W. S. Cooper, Dr. W. V. White, Dr. S. D. Willard; Dr. W. F. Underwood, with encl.; Dr. C. P. Chamberlain, with encl.; Dr. L. Bauer, Dr. J. A. Monell, Dr. Jno. Burk; Dr. C. Washburn, with encl.; Dr. C. S. Hurlbut, with encl.; Dr. J. W. Barr, Dr. W. Akin; Drs. F. G. Pettijean, S. S. Fitch, A. Lewis, J. Vankleeck, J. McCuen Smith, R. S. Olmstead, B. Haran, C. Smith, Chas. Cones, R. Blakelock, F. H. Bangs, Geo. Wilkes, J. H. Hinton, J. F. Chauveau, Geo. H. Tucker, G. Dieffenbach and Bro., R. Goodale, E. W. Chapman, J. A. Williams, T. S. Rider, G. H. Taylor, J. K. Vanderveer, Peter Van Buren, each with encl. *Ohio*—Dr. W. M. Lyon, with encl.; Dr. J. W. Thompson, Dr. H. P. Kay, with encl.; Dr. S. C. Franks, with encl.; Dr. S. H. Farrington, with encl.; Dr. W. G. Minteer. *Pennsylvania*—Drs. U. F. Ritter, H. West, A. L. Alstead, G. R. Hurst, J. H. Fager, D. W. Bashore, J. R. Amberger, W. Graydon, Lewis Heck, J. Swartz, J. M. B. Jackson, F. Sorg, P. L. Greenleaf, J. B. Sterrett, James Frew, John P. Lewis, each with encl.; Dr. R. B. Mowry, with encl.; Dr. Jno. H. Fager, Dr. D. Gamble, Dr. A. P. Dutcher, Dr. J. W. Thompson, with encl. *Rhode Island*—Dr. L. A. Martin, with encl. *Wisconsin*—Dr. C. L. Stoddard.

Office Payments.—Mr. Helmold, (adv.); Drs. J. S. Carter, Jewell, Van Dyke, Mann, Jackson; Mr. Kolbe, (adv.)

Vital Statistics.

Of Philadelphia, for the week ending Dec. 7, 1861:

Deaths—Males, 109; females, 131; boys, 64; girls, 71. Total, 240. Adults, 105; children, 135. Under two years of age, 74. Natives, 184; Foreign, 46. People of color, 10.

Among the causes of death, we notice—Apoplexy, 5; convulsions, 8; croup, 7; cholera infantum, 0; cholera morbus, 0; consumption, 9; diphtheria, 7; diarrhœa and dysentery, 3; dropsy of head, 6; debility, 23; scarlet fever, 16; typhus and typhoid fever, 9; inflammation of brain, 2; of bowels, 3; of lungs, 26; bronchitis, 1; congestion of brain, 3; of lungs, 2; erysipelas, 0; hooping-cough, 0; marasmus, 2; small-pox, 10.

For week ending December 8, 1860.....213
" " December 7, 1861.....240

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 2367.

Of Boston, for the week ending Nov. 30, 1861:

Deaths—Males, 36; females, 49. Total, 85. Natives, 55; Foreign, 30.

Among the causes of death, we notice—Phthisis, 24; cholera infantum, 0; croup, 1; scarlet fever, 0; pneumonia, 6; variola, 0; dysentery, 0; typhus fever, 1; diphtheria, 0; hooping-cough, 3; convulsions, 1.

Population of Boston, 1860, 177,902. Average corrected to increased population, 83.9.

Of New York, for the week ending Dec. 2, 1861:

Deaths—Males, 170; females, 162; boys, 101; girls, 81. Total, 332. Adults, 150; children, 182. Under two years of age, 110. Natives, 213; Foreign, 119; Colored, 1.

Among the causes of death, we notice—Apoplexy, 5; infantile convulsions, 15; croup, 9; diphtheria, 10; scarlet fever, 25; typhus and typhoid fevers, 8; cholera infantum, 0; cholera morbus, 0; consumption, 51; small-pox, 5; dropsy of head, 12; infantile marasmus, 20; diarrhœa and dysentery, 0; inflammation of brain, 7; of bowels, 13; of lungs, 22; bronchitis, 13; congestion of brain, 7; of lungs, 0; erysipelas, 2; hooping-cough, 4; measles, 2. 175 deaths occurred from acute disease, and 29 from violent causes.

Population of New York, 814,277. Mortality, 1 in 2327.

Medical Directory.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth Street.

Medical Clinic on Wednesdays and Saturdays, at 10 A.M., by Dr. Gerhard.

Surgical do., at 11 A.M., by Dr. Geo. W. Norris.

Medical Library of the Pennsylvania Hospital.—Open on Wednesdays and Saturdays.

Philadelphia Hospital.—Medical Clinic on Wednesdays and Saturdays, at 9½ A.M., by Dr. J. L. Ludlow.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A.M., by Dr. D. H. Agnew.

Wills Hospital for the Eye and Limb.—Clinics, Wednesdays and Saturdays, at 11 A.M., by Dr. William Hunt.

Howard Hospital, Lombard Street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P.M. Monday and Thursday—Dr. Turnbull, at 1 P.M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P.M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1; and Dr. Morehouse, at 5 P.M. Monday and Thursday—Dr. Meigs, at 5 P.M. Tuesday and Friday—Dr. Atkinson, at 3½ P.M.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P.M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesdays and Saturdays, at 1 P.M., by Prof. Smith.

Dispensary Service every afternoon at 3 P.M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street.—Clinical Lectures daily, (except Sunday,) from 2 to 4 P.M., by Dr. Goodwillie.

Philadelphia Lying-in Charity.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning, at 9 o'clock, by Dr. Edwin Scholfield.

CONNECTICUT MUTUAL LIFE INSURANCE COMPANY.

HARTFORD, CONN.

Accumulated Capital over $4,000,000.

JAMES GOODWIN, President. G. R. PHELPS, Secretary.

Its ECONOMY in the management of business permits large dividends to policy holders, which have averaged 50 *per cent.* per annum.

Applications for Insurance received, and Pamphlets, and every information in regard to the business, furnished on application, by mail or otherwise, to

WADLEIGH & TILDEN, Agents,
404 WALNUT STREET,
268—eow 3m PHILADELPHIA.

CASTLETON MEDICAL COLLEGE.

CASTLETON, VERMONT.

Sixty-First Session, 1862.

Corydon L. Ford, M.D., Professor of Anatomy.

Adrian T. Woodward, M.D., Professor of Obstetrics and Diseases of Women and Children.

George Hadley, M.D., Professor of Chemistry.

William P. Seymour, M.D., Professor of Materia Medica and Therapeutics.

E. K. Sanborn, M.D., Professor of Surgery.

P. D. Bradford, M.D., Professor of Physiology and Pathology.

P. Pineo, M.D., Professor of Medical Jurisprudence.

Charles L. Allen, M.D., Professor of Theory and Practice of Medicine.

The Annual Course of Lectures will commence on the last Thursday of February, and continue four months.

Fees.—For a full Course of Lectures, $50.00; Matriculation Ticket, $5.00; Graduation Fee, $16.00.

Dissecting Classes will be formed in January and February and during the term.

Anatomical material supplied at a reasonable cost.

Good board can be obtained at from $2.50 to $3.00 a week.

CHARLES L. ALLEN, *Dean.*

Castleton, Vermont, Dec. 10th, 1861. 269—3m

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, Nos. 270, 271. PHILA., DECEMBER 21, 28, 1861. New Series, Vol. VII. Nos. 12, 13.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By Louis Bauer, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

INTRODUCTORY LECTURE.

All individual efforts of other practitioners have signally failed in this direction. Their professional pride did not allow them to call upon the public for support, and professional encouragement and favor were withheld. Hence orthopædic surgery has as yet acquired no status, and is certainly no common property of the American profession.

The term "orthopædic," first used by Andry, has been generally accepted for that subdivision of the healing art which considers the deformities of the human frame, their prevention, causes, and treatment. The etymology of the term is derived from *ορθός*, straight, *παιδεύω*, to educate.

Orthopædy does not include, however, all deformities, especially those of a mere transient nature; as, for instance, the deformities connected with fractures and dislocations. The malposition of the eyeball (strabismus) has been properly transferred to ophthalmology. Defects and distortions of the integuments, and their relief, form another subdivision under the appellation of plastic surgery, and so on. Thus orthopædy is strictly limited to the more permanent and not rarely congenital deformities of the skeleton and the locomotive apparatus. These deformities originate more or less spontaneously, either on account of morbid changes and actions of the nervous system, or vitiated nutrition, (rachitis.) It should, however, be borne in mind that descriptive definitions are rarely perfect, and that discrepancies must necessarily arise from an artificial grouping of diseases. Thus, for instance, the deformities caused by the cicatrices of burns, in the neighborhood of articulations, have been drawn into the orthopædic domain, simply because they most usually demand mechanical appliances to overcome their prejudicial effects.

With but few exceptions, almost all deformities of the body are of a *consecutive* character; the bones act merely as passive agents in following the traction of the muscles. The latter, in their turn, are subservient to the nervous system, reflecting all the morbid changes that may take place in that sphere. If, however, a deformity has become firmly established, and has lasted for some time, both bones and muscles undergo more or less permanent changes in form and texture, and the difficulty may ultimately become irremediable. The ligaments are, by virtue of their structure and function, not as often implicated in deformities, as bones and muscles. Sometimes they are compromised in the formation of the sclerotic tissues at the articulations; in paralysis they seem to become relaxed, and therefore facilitate an undue mobility of their respective joints. But a contraction of ligaments is a physiological impossibility. Their dimension is regulated by elasticity. Now they may lose that elasticity by structural changes; they may become elongated by loss of elastic fibers and excess of fat. It can, however, not be conceived how they can become shortened by any other process than sclerosis, and this presupposes local inflammation.

A most fertile source of deformities is the diseases of joints. Not so much from displacements, anchylosis, or cicatrices, as from permanent contraction of muscles. There is scarcely an articular affection that is not more or less complicated with muscular contractions, and consequently with deformity, mostly of permanent duration. The true pathological nature of these muscular contractions has only of late been recognized,

and its indirect connection with the morbid process in the joint traced to *the reflex action of the spinal cord.* It is not our province to enter largely into an investigation of this most interesting phenomenon, which is so intimately connected with diseases of joints. But having taken an active part in its pathological investigation, a brief digression will be the more justifiable, as there are still practitioners who dispute these views.

Whenever a patient is attacked with an articular disease of some violence, one of the most prominent symptoms is *attenuation of the extremity.* This symptom you will meet with in *nine cases out of ten,* and it is too strongly marked to escape attention.

In the commencement of the articular disease, the attenuation is, of course, less than in its advanced stage. In some cases the circumference of the limb is diminished one-fourth, and even as much as a third part. The waste of the member is not confined to the adipose tissue, but extends likewise to the muscles.

The next symptom in the same direction is the *general coolness* of the member, whereas the affected joint most usually exceeds the ordinary temperature of the body.

Next, *a peculiar pain* sets in, which is indeed widely different from that painful soreness that belongs to the inflamed tissues themselves, and which increases and diminishes with the progressive or regressive phases of the morbid process.

That pain is *periodic, intermittent,* and *nocturnal;* it seems to be independent of external causes; it appears with *the rapidity of lightning,* and passes away with the same quickness, lasting hardly long enough *to rouse the patient thoroughly* from his slumber, and is to all appearance *most intense,* judging from the shrieks the patient utters. That pain is indeed very characteristic of articular diseases. The physician meets but rare opportunities to witness its immediate manifestations, occurring, as they do, always during the night. But once heard, they can never be forgotten.

It is certainly as reliable for the diagnosis as the *peculiar tone in croup,* or the cries of a parturient woman in the third stage of labor. Having had numerous patients under our own roof so afflicted, we have had ample opportunities to observe and study that symptom.

At last, *muscular contractions* begin to show themselves, and thus culminate in *a series of reflex actions* of the spinal cord, in the sensitive motor and nutritive spheres of that organ.

Strange to say, the truth of these observations has been disputed with persistent obstinacy. The most trivial and superficial theories have been more readily accepted, even at this present day, than an explanation which is based on both clinical experience and physiological facts.

The attenuation of the limb was said to be the result of *long-continued rest,* and the muscular contraction as *the product of volition.* The absurdity of such an interpretation of two positive symptoms is self-evident. Local attenuation is, without exception, *the consequence of disturbed nervous action,* and invariably *greater* when the innervation is *morbidly increased* than when it is *diminished* or even extinct. These are stubborn facts, readily verified by comparing *completely paralyzed limbs* with those in a state of *reflected* muscular contraction.

As to the latter themselves, we shall find ample occasions to satisfy your minds that they are morbid products, *beyond the will and control of the patient;* nay, more, we shall be able to show that in cases of long standing, as already remarked, they become a *structural disease,* entirely independent of its direct and indirect causes. Nothing can more effectually illustrate the position we have assumed, in this question, than to place a patient thus affected under the influence of chloroform. You will find that the most profound anæsthesia is unable to relax the tenseness of the contracted muscles, and that the knife is the only remedy left. To speak in the face of so demonstrative an *argumentum ad hominem* is simply absurd.

You will now readily understand why articular diseases are so fertile a source of orthopædic material, and why you can extend your practical utility far beyond the ordinary limits of medical efficacy, by paying close attention to the subject under consideration.

At this place we feel solicitous to inculcate a practical axiom, which you may adopt with great advantage in the treatment of articular diseases. Resort to *extension* in all *incipient contraction* of muscles depending on that cause; but beware of it in advanced cases, for you will not only fail in accomplishing anything good, but you may even risk the increase or reproduction of the original disease from which such contractions originated.

Notwithstanding the great advancement in

physiology, we have, as yet, to learn the detailed laws of reflex action.

We are informed that reflex motion is invariably instigated by sensation, while it is positively denied that by the excitation of motor nerves, the sensitive fibers can be acted on. Facts, however, to the direct contrary, and hereafter to be adduced, stare us in the face, and allow of no denial.

Another observation in neuro-pathology is not fully comprehensible, viz., the continuance of reflected muscular contraction *beyond the termination of the pre-existing cause.* This refers both to the lesions of the joints and central diseases of the nervous system, and thus opens a wide field for attractive physiological investigation. In some instances the change of structure may account for the permanency of the contraction. But in recent cases that interpretation is not plausible.

In motor paralysis we frequently meet with contractions of single muscles, or entire groups. To all appearance, both the paralysis and the contractions emanate from the same pathological source, though differing, perhaps, in the time of their commencement. Often paralysis and contraction set in simultaneously. Sometimes the former precedes the latter by months and years, or the subsequently contracted muscles may have been previously paralyzed.

Pure reflex contraction occurs only in *healthy muscular structure.* The coincidence of paralysis and contraction is a very interesting phenomenon, and its proximate cause has greatly puzzled pathologists. The difficulties are, however, more apparent than real. Physiology discloses the means by which we may penetrate the mystery. Remember that all muscles subservient to our will are endowed with two different sets of nervous fibers. The one descending from the brain, conveying the impulses of volition; the other originating in the ganglionic structure of the spinal cord. The excito-motor innervation of the latter is, by far, the more powerful. Thus it happens that in spinal palsy the will may still prompt a muscle to a feeble action, and in cerebral paralysis contractions of muscles may take place by centrifugal or centripetal excitation.

Muscles that have lost all their excitability, and upon which the galvanic current can produce no effect, are totally incapable of contraction, either transient or permanent.

We have observed a goodly number of cases that fully bear out the proffered explanation, but consider it hardly necessary to narrate them on this occasion.

Whatever may be the cause of tonic muscular contractions, whether they be of shorter or longer duration, they are scarcely susceptible to any other remedy than the knife. This seems rather strange, that symptoms should perpetuate their existence beyond the exciting cause, yet the numerous facts in proof are so indisputable as to allow of no doubt.

Whether the contraction be perpetuated by nutritive changes of the muscular structure, preventing relaxations, as, for instance, by sclerotic tissue, changes not as yet sufficiently investigated or determined, is a question too subtle for a premature answer. At any rate, the structural explanation would fail to satisfy our mind in recent cases, unless nutrition is, indeed, more rapid in the contracted muscular structure than we have reason to believe. The idea is therefore suggested, that the interested nerves themselves participate materially in the perverted nutrition, or a habit of action is set up, determining the duration of the contraction, as is certainly the case in clonic spasm.

Respecting congenital deformities from contracted muscles, we can admit no other pathological laws than in acquired ones. The hypothesis advanced by Cruveilhier, that the position of the fœtus in utero had something to do with the former, seems to us untenable, in as far as the muscles are concerned.

Paralysis may give rise, in different ways, to deformities: First, the joints lose their firmness and support, by the relaxation of their muscles and ligaments, bending in the direction to which their surfaces may incline. This state implies complete motor paralysis, and constitutes *passive deformity.* Secondly, but one muscular group may be paralyzed, and its antagonists retain more or less power, and draw the joint to their side.

That paralysis of motion and sensation, or of either, greatly interferes with nutrition of the member, we have already adverted to. It is, however, evident to our mind that diminution of maintenance is by far more marked in palsy emanating from the spinal cord than from the brain. The difference is purely anatomical on account of the spinal nerves receiving a greater complement of fibers, from the great sympathetic system governing the organic functions.

In proportion to the sluggish nutrition in para-

lyzed parts of the body, stands the repair. All structural disturbances manifest a degree of venous hyperæmia, and a great tendency to sloughing. *A true, active inflammation scarcely ever takes place in paralyzed extremities*, which is but an analogue of the fact that *inflammation is never observed in the lower species of animals with an imperfect nervous system.*

In the catalogue of general causes productive of deformities, to the *disturbance of the center of gravity* of the body has been assigned a prominent place. We shall occupy your attention in giving the subject a general consideration.

To the diligent and instructive experiments of Prof. Weber we owe the accurate knowledge of the mechanical laws engrafted upon the construction of the human frame and its locomotion.

First Experiment.—Place a board upon a wooden prism, and balance it accurately. Then place a well man horizontally upon it; you will then perceive that if both man and board are accurately balanced, the fibro-cartilaginous articulation of the last lumbar vertebra with the sacrum bone will rest upon the prism. (*Fig.* 1.)

Fig. 1.

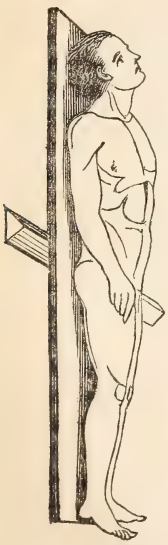


Fig. 2.

Second Experiment.—Place a man vertically upon a balanced board on a prism, as exemplified in *Fig.* 2, and drop a plummet line laterally from above the head to the superior angle of the prism; you thus divide the body into an anterior and posterior half; and in the same way, the occipito-atloid, sacro-vertebral, shoulder, hip, knee, and tibio-tarsal articulations.

Third Experiment.—Balance a man on the prism, so that his mesian line becomes continuous with the angle of the prism, and drop the plummet line on his back; the result will be that the line divides the body into two halves, a right and a left one, and at the same time the sacro-vertebral articulation.

It follows, therefore, that at the center of that articulation the center of gravity of the body is located.

Anything tending to increase or diminish the weight of either side of the body will inevitably throw it out of its perpendicular. Thus, the loss of one of the extremities will disturb the center of gravity. The enlargement of one of the internal organs, more especially the liver; the distention of one of the pleural sacs with fluid, or a tumor of some size on one side of the mesian line, would have the same physical effect. Inasmuch as the like causes are of a more transitory existence, and the body is in a condition to allow the change of posture, their influence upon the frame will be a temporary distortion only; if, indeed, it could be called so, and vice versa. We know patients who, for half a century, have suffered from declivity of the pelvis, on account of shortness and malposition of one of the lower extremities, and their spine is consequently thrown out of the perpendicular. In fact, if they assume the erect posture or gait, their vertebral column presents the lateral sigmoid form. Yet if they sit down, and their pelvis rests equally upon the seat, the spine becomes perfectly straight. You perceive, therefore, that the change of position counterbalances physical defects, and prevents permanent distortions of the frame.

From these facts, and numerous others which might be adduced, it follows, conclusively, that the simple mechanical derangement of the center of gravity can alone effect no permanent consecutive deformities; and that another pathological element has to come into play.

Some orthopædic surgeons, and more especially the late Dr. Buehring, of Berlin, deduce the pre-existing cause adverted to from two sources: 1st. From the *natural* deviation of the spine from its perpendicular toward the right of the mesian line. 2d. From *constitutional debility and inefficient nutrition* at certain periods of life.

With reference to the former, we have to say that the assertion is correct, in point of fact. Numerous measurements of the spinal column in healthy and otherwise well-formed persons with the plummet line, instituted by Buehring, ourselves, and others, have clearly demonstrated such a deviation, however trifling. And the fact that by far the largest proportion of lateral curvatures of the spine occur toward the right, obviously strengthens the position of Buehring.

Whether that deviation is the result of the exceptional exercise of the right arm, or whether the unequal weight upon the spine by symmetry of the internal organs, increased by the diagonally acting heart, the spine is thus hammered out, as Buehring presumes, we are not as yet prepared to determine.

In reference to the second cause, we sincerely believe it to be the most prominent in the establishment of lateral curvature. In its behalf speaks clinical observation. Five-sixths of all deformities of this class occur in girls, and at the time of their change in life, when their system is somewhat deranged; when the uterine function has not as yet become well regulated; when the blood is impoverished, or even hydræmic; and when, consequently, their nutrition is insufficient. In the rugged and robust daughters of the poorer classes, lateral curvature is but rarely seen. Among the physically neglected young ladies that deformity is widely diffused. We mean not to say that other causes are not productive of the same effect, yet this we are sure of, that debility of the constitution is the most general one.

Idiopathic deformities, that is to say, deformities of a strictly local character, are few in number and rare in occurrence. The most prominent are those from burns in the neighborhood of joints.

Next we have to mention the inflammation of muscles, with subsequent *progressive* alteration of their texture, or, which has been termed by Duchenne and Remak, *progressive paralysis*. This disease implies two pathological elements: *change of structure* and *loss of tonicity*. The transversely striated muscular fibers gradually disappear, and sclerotic tissue is substituted in their place, or fatty degeneration ensues. In the one, shortening of the muscular belly and deformity is the inevitable result. In the other, the muscle is, to all intents and purposes, extinct. Fortunately, the disease is altogether rare, but few legitimate cases having been recorded. We have never had an opportunity of personally observing one.

It has been maintained that the disease may gradually invade the entire muscular system, and successively disqualify it for its physiological office, and that the uninterrupted galvanic current is the sovereign remedy. We have no personal experience on this topic, and have therefore to refer you to the respective works of Duchenne and Remak.

The preceding remarks on the causes of deformities have been purposely of a general nature. We did not intend, for the sake of completeness, to put forth things which are fully known to every practitioner, nor to enter upon causes which we have to touch upon again under the special heads of our subject.

At this point we desire to lay before you the plan we intend to pursue. The orthopædic specialty embraces subjects of mere formal connection. System cannot well be observed in the course of these lectures. We shall therefore follow the topographic order, with the exception of deformities originating in rachitis, and these will be considered under a common head.

Deformities have been divided—

1st. As to the time of their commencement:

a. Hereditary.

b. Congenital.

c. Acquired.

2d. As to their origin:

a. Primitive.

b. Consecutive.

3d. As to the system principally involved:

a. Deformities radiating from the nervous system.

b. From vitiated nutrition.

c. From the muscular system.

4th. As to seat:

a. Deformities of the extremities.

b. Deformities of the trunk, with their respective topographic subdivisions.

To be continued.

Dr. Griswold, Surgeon to the 38th Regiment New York Volunteers, died in Charleston, S. C., on the 30th ultimo.

Promotion in the Volunteer Medical Department.—The Surgeon-General of the State of New York has issued the following order:—

"Whenever the position of surgeon becomes vacant, it will be filled by *promotion* from the corps of assistants. The effect will be, that whoever enters service must do so as assistant surgeon."

COMMUNICATIONS.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

By Geo. K. Smith, M.D.,

Demonstrator of Anatomy in the Long Island College Hospital, Brooklyn, New York.

The following is a table showing the insertion of the normal capsule in sixty-one specimens, accurate measurements of which have been taken. Different methods have been adopted in order to arrive at a definite knowledge of the insertion of the capsule. The entire hip-joint has, in many instances, been removed, and its capsule either distended with air, by the blow-pipe, or injected with plaster of Paris, and then allowed to dry before measurements were taken. Other specimens have, in the recent state, been measured after the disarticulation of the joint. For the opportunity of measuring many of these specimens, I am indebted to the kindness of my friend Charles J. Seymour, a student of the New York "University Medical College," who obtained the specimens and kept them for me till I could measure them.

The results obtained by the injection of the capsule with plaster were more satisfactory than those in which it was distended with air; for, after the plaster had hardened, I was enabled to dissect up the external fibers of the capsule, which have their insertion into the anterior inter-trochanteric line, and leave that portion of the capsule which is reflected upward on the neck, forming its periosteum; thus showing the extent of the cavity lined by the synovial membrane, and illustrating the fact that a fracture of the neck may, in some instances, be extra-capsular and yet be situated some distance within the anterior inter-trochanteric line. (See figure 1.) The capsule being much thinner on the posterior surface of the neck than on the anterior, requires no dissection to show the extent of its cavity after it is filled with the plaster injection.

I have in my possession a large collection of specimens showing the insertion of the normal capsule, but few of which are represented by the engravings. Many more might be given, if it were necessary. Those of which delineations are given illustrate very well the facts which all unite to prove. The drawings from which the engravings were copied are accurate representations of the specimens, taken by my friend Constantin Herzberg, a distinguished artist now teaching at the Cooper Union in the City of New York, also at the Polytechnic Institute of this city. The points from which measurements were taken in making out the following table may be seen in figures 3 and 4. The length of the neck was obtained by measuring from the points given in the inter-trochanteric lines to those situated on the corona or cartilaginous edge of the head. The insertion of the capsule was ascertained by measuring: first, from the points in the inter-trochanteric lines to the insertion of the capsule in the direction of the axis of the neck; and second, from the points on the corona to capsular insertion.

Length of the neck, showing on its anterior surface the distance from A to B, and C to D, respectively; also showing in like manner on the posterior and inferior surfaces of the neck, the distances from A to B, C to D, and E to F. (See figs. 3 and 4.)	Distances from the inter-trochanteric lines to the insertion of the capsule. The measurements on the anterior surface of the neck were taken from the points A and C, respectively; and those on the posterior surface were taken in the same order from the points A, C, and E. (See figs. 3 and 4.)	Distances from the corona or cartilaginous edge of the head, to the insertion of the capsule. The measurements on the anterior surface of the neck were taken from the points B and D, respectively; and those on the posterior surface were taken from the points B, D, and F, in the same order. (See figs. 3 and 4.)
No. 1 { Anterior.....$1\frac{1}{4}$.....$1\frac{1}{2}$	$\frac{1}{4}$..... $\frac{1}{2}$	1 1
Posterior.....2 .....$2\frac{1}{4}$.....$2\frac{1}{2}$	$1\frac{1}{8}$.....$1\frac{1}{2}$.....$1\frac{3}{4}$	$\frac{7}{8}$..... $\frac{3}{4}$..... $\frac{3}{4}$
" 2 { Anterior.....$1\frac{1}{4}$.....$1\frac{3}{4}$	$\frac{1}{8}$..... $\frac{1}{2}$	$1\frac{1}{8}$.....$1\frac{1}{4}$
Posterior.....$1\frac{1}{2}$.....$1\frac{5}{8}$.....$1\frac{7}{8}$	$\frac{3}{4}$.....1 .....$1\frac{1}{4}$	$\frac{3}{4}$..... $\frac{5}{8}$..... $\frac{5}{8}$
" 3 & 4 { Anterior.....1 .....$1\frac{1}{4}$	$\frac{1}{8}$..... $\frac{1}{2}$	$\frac{7}{8}$..... $\frac{3}{4}$
Posterior.....$1\frac{1}{2}$.....$1\frac{3}{4}$.....$1\frac{7}{8}$	$\frac{1}{8}$.....1 .....$1\frac{1}{8}$	$1\frac{3}{8}$..... $\frac{3}{4}$..... $\frac{3}{4}$
Anterior.....1 .....$1\frac{1}{4}$	$\frac{1}{8}$..... $\frac{1}{2}$	$\frac{7}{8}$..... $\frac{3}{4}$
Posterior.....$1\frac{1}{2}$.....$1\frac{3}{4}$.....$1\frac{7}{8}$	$\frac{1}{8}$.....1 .....$1\frac{1}{8}$	$1\frac{3}{8}$..... $\frac{3}{4}$..... $\frac{3}{4}$
" 5 & 6 { Anterior..... $\frac{7}{8}$.....$1\frac{1}{2}$	$\frac{1}{8}$..... $\frac{1}{2}$	$\frac{7}{8}$..... $\frac{3}{4}$
Posterior.....$1\frac{1}{2}$.....$1\frac{5}{8}$.....$1\frac{7}{8}$	$\frac{3}{8}$.....1 .....$1\frac{1}{2}$	$\frac{3}{4}$.....1
Anterior..... $\frac{7}{8}$..... $\frac{1}{2}$	$\frac{1}{8}$..... $\frac{1}{2}$	$1\frac{1}{8}$..... $\frac{5}{8}$..... $\frac{3}{8}$
Posterior.....$1\frac{1}{2}$.....$1\frac{5}{8}$..... $1\frac{7}{8}$	$\frac{3}{8}$.....1 .....$1\frac{1}{2}$	$\frac{3}{4}$.....1
		$1\frac{1}{8}$..... $\frac{5}{8}$..... $\frac{3}{8}$

Length of the neck, showing on its anterior surface the distances from A to B, and C to D, respectively; also showing in like manner on the posterior and inferior surfaces of the neck, the distances from A to B, C to D, and E to F. (See figs. 3 and 4.)				Distances from the inter-trochanteric lines to the insertion of the capsule. The measurements on the anterior surface of the neck were taken from the points A and C, respectively; and those on the posterior surface were taken in the same order from the points A, C, and E. (See figs. 3 and 4.)			Distances from the corona or cartilaginous edge of the head, to the insertion of the capsule. The measurements on the anterior surface of the neck were taken from the points B and D, respectively; and those on the posterior surface were taken from the points B, D, and F, in the same order. (See figs. 3 and 4.)		
No. 7 & 8	Anterior	1½	1¾		⅛	⅞		1⅜	1¾
	Posterior	1¾	2	2½	1	1¼	1½	¾	¾	1
	Anterior	1½	1¾		⅛	⅞		1⅜	1¾
	Posterior	1¾	2	2½	1	1¼	1½	¾	¾	1
" 9 & 10	Anterior	1	1¼		⅛	½		⅞	¾
	Posterior	1⅜	1⅝	1⅝	¾	1	1	⅝	⅝	⅝
	Anterior	1	1¼		⅛	½		⅞	¾
	Posterior	1⅜	1⅝	1⅝	¾	1	1	⅝	⅝	⅝
" 11 & 12	Anterior	1⅛	1½		⅛	⅜		1	1⅛
	Posterior	1¼	1¼	1½	½	⅝	1	¾	½	½
	Anterior	1⅛	1½		⅛	⅜		1	1⅛
	Posterior	1¼	1¼	1½	½	⅝	1	¾	½	½
" 13 & 14	Anterior	1⅛	1¾		⅛	½		1	1¼
	Posterior	1½	2	2	1	1¼	1¼	½	¾	¾
	Anterior	1⅛	1¾		⅛	½		1	1¼
	Posterior	1½	2	2	1	1¼	1¼	½	¾	¾
" 15 & 16	Anterior	⅞	1½		⅛	⅜		¾	1⅛
	Posterior	1⅜	1½	1⅞	⅝	¾	1	¾	¾	⅞
	Anterior	⅞	1½		⅛	⅜		¾	1⅛
	Posterior	1⅜	1½	1⅞	⅝	¾	1	¾	¾	⅞
" 17 & 18	Anterior	1¼	1½		⅛	¾		1⅛	¾
	Posterior	1⅜	1½	1⅝	¾	⅞	1	⅝	¾	⅝
	Anterior	1¼	1½		⅛	¾		1⅛	¾
	Posterior	1⅜	1½	1⅝	¾	⅞	1	⅝	¾	⅝
" 19 & 20	Anterior	1¼	1¾		⅛	½		1⅛	1¼
	Posterior	1½	1¾	2	½	⅝	1	1	1	1
	Anterior	1½	1¾		⅛	½		1⅛	1¼
	Posterior	1½	1¾	2	½	⅝	1	1	1½	1
" 21	Anterior	1½	1¾		⅛	½		1⅜	1¼
	Posterior	1½	2	2⅛	⅞	1⅛	1¼	⅝	⅞	⅞
" 22	Anterior	1½	1¾		⅛	½		1⅜	1¼
	Posterior	1½	2	2⅛	⅞	1⅛	1¼	⅝	⅞	⅞
" 23 & 24	Anterior	1¼	1⅝		⅛	½		1⅛	1⅛
	Posterior	2	2½	2⅝	1	1¼	1⅝	1	1	1
	Anterior	1¼	1⅝		⅛	½		1⅛	1⅛
	Posterior	2	2¼	2⅝	1	1¼	1⅝	1	1	1
" 25	Anterior	1⅛	1½		⅛	⅝		⅞	⅞
	Posterior	1½	1⅝	1⅞	½	⅝	⅞	1	1	1
" 26	Anterior	1¼	1¾		⅛	½		1⅛	1⅛
	Posterior	1¼	1½	1¾	½	¾	1	¾	¾	¾
" 27	Anterior	1	1¾		⅛	¾		⅞	1
	Posterior	1½	1¾	2¼	¾	1⅛	1¾	¾	⅝	½
" 28 & 29	Anterior	1½	1½		¼	½		¾	1
	Posterior	1½	1¾	2	¾	1	1¼	¾	¾	¾
	Anterior	1⅛	1½		¼	½		⅞	1
	Posterior	1½	1¾	2	¾	1	1¼	¾	¾	¾
" 30 & 31	Anterior	1¼	1½		¼	½		1	1
	Posterior	1⅜	1¾	2	¾	1⅛	1½	⅝	⅝	½
	Anterior	1¼	1½		¼	½		1	1
	Posterior	1⅜	1¾	2	¾	1⅛	1½	⅝	⅝	½
" 32 & 33	Anterior	1½	1¾		⅛	¼		1⅛	1⅛
	Posterior	1½	1⅝	1¾	¾	1	1⅛	¾	⅝	⅝
	Anterior	1½	1¾		⅛	¼		1⅛	1⅛
	Posterior	1½	1⅝	1¾	¾	1	1⅛	¾	⅝	⅝
" 34 & 35	Anterior	1	1¾		¼	½		1	1
	Posterior	1½	1¾	1¾	1	1	1	½	¾	¾
	Anterior	1	1¾		¼	½		¾	1⅛
	Posterior	1½	1¾	1¾	1	1	1	½	¾	¾

Length of the neck, showing on its anterior surface the distances from A to B, and C to D, respectively; also showing in like manner on the posterior and inferior surfaces of the neck, the distances from A to B, C to D, and E to F. (See figs. 3 and 4.)	Distances from the inter-trochanteric lines to the insertion of the capsule. The measurements on the anterior surface of the neck were taken from the points A and C, respectively; and those on the posterior surface were taken in the same order from the points A, C, and E. (See figs. 3 and 4.)	Distances from the corona or cartilaginous edge of the head, to the insertion of the capsule. The measurements on the anterior surface of the neck were taken from the points B and D, respectively; and those on the posterior surface were taken from the points B, D, and F, in the same order. (See figs. 3 and 4.)
No. 36 Anterior.....1½.....2	½..... ¾	1 .....1¼
Posterior.....1¾.....1½.....1⅞	⅞.....1 .....1¼	⅞..... ½..... ⅝
" 37 Anterior.....1 .....1⅝	⅛..... ⅝	⅞.....1⅛
Posterior.....1¾.....1⅝.....1⅝	1 .....1 .....1 3/16	¾..... ⅝..... ½
" 38 Anterior.....1¼.....1⅜	¼..... ½	1 ..... ⅝
Posterior.....1½.....1½.....1⅝	¾.....1 1	¾..... ½..... ⅝
" 39 Anterior.....1⅛.....1¼	⅛..... ½	1 ..... ¾
Posterior.....1¼.....1⅝.....1⅞	¾.....1 .....1⅛	½..... ⅝..... ¾
" 40 Anterior.....1¼.....1½	½..... ⅝	¾..... ⅞
Posterior.....1¼.....1½.....1⅞	¾..... ⅞.....1	½..... ⅝..... ⅞
" 41 Anterior.....1⅛.....2	¼..... ½	⅞.....1⅛
Posterior.....1⅜.....1⅝.....2	½..... ⅞.....1¼	⅞..... ¾..... ¾
" 42 & 43 Anterior.....1¼.....1¾	¼..... ½	1 .....1¼
Posterior.....1¼.....1½.....1¾	1 ..... ¾.....1¼	¼..... ¾..... ½
Anterior.....1¼.....1¾	¼..... ½	1 .....1¼
Posterior.....1¼.....1½.....1¾	1 ..... ¾.....1¼	¼..... ¾..... ½
" 44 & 45 Anterior.....1⅜.....1⅝	⅛..... ¼	1¼.....1⅜
Posterior.....1½.....1⅝.....1¾	⅞.....1 .....1⅛	⅝..... ⅝..... ⅝
Anterior.....1⅜.....1⅝	⅛..... ¼	1¼.....1⅜
Posterior.....1½.....1⅝.....1¾	⅞.....1 .....1⅛	⅝..... ⅝..... ⅝
" 46 & 47 Anterior..... ⅞.....1½	¼..... ⅜	⅝.....1⅛
Posterior.....1⅜.....1½.....1¾	⅝..... ⅞.....1¼	¾..... ⅜..... ½
Anterior..... ⅞.....1½	¼..... ⅜	⅝.....1⅛
Posterior.....1⅜.....1½.....1¾	⅝..... ⅞.....1¼	¾..... ⅝..... ½
" 48 & 49 Anterior.....1¼.....1⅜	⅛..... ⅜	1⅛.....1
Posterior.....1¼.....1½.....1⅝	¾..... ⅞.....1	½..... ⅝..... ⅝
Anterior.....1¼.....1⅜	⅛..... ⅜	1⅛.....1
Posterior.....1¼.....1½.....1⅝	¾..... ⅞.....1	½..... ⅝..... ⅝
" 50 & 51 Anterior.....1 2	¼..... ⅝	¾.....1⅜
Posterior.....1⅝.....1¾.....1⅞	½..... ¾.....1	1⅛.....1 .....⅞
Anterior.....1 2	¼..... ⅝	¾.....1⅜
Posterior.....1⅝.....1¾.....1⅞	½..... ¾.....1	1⅛.....1 .....⅞
" 52 & 53 Anterior.....1 2	⅛..... ⅝	⅞.....1⅜
Posterior.....1⅝.....2 .....2⅛	¾.....1 .....1½	⅞.....1 .....⅝
Anterior.....1 2	⅛..... ⅝	⅞.....1⅜
Posterior.....1⅝.....2 .....2⅛	¾.....1 .....1½	⅞.....1 .....⅝
" 54 & 55 Anterior.....1 2	⅛..... ½	⅞.....1½
Posterior.....1½.....1¾.....1¾	¾..... ¾.....1	¾.....1 .....¾
Anterior.....1 2	⅛..... ½	⅞.....1½
Posterior.....1½.....1¾.....1¾	¾..... ¾.....1	¾.....1 .....¾
" 56 & 57 Anterior.....1 2	⅛..... ½	⅞.....1½
Posterior.....1½.....1¾.....2	¾.....1 .....1¼	¾..... ¾..... ¾
Anterior.....1 2	⅛..... ½	⅞.....1½
Posterior.....1½.....1¾.....2	¾.....1 .....1¼	¾..... ¾..... ¾
" 58 & 59 Anterior..... ¾.....1½	⅛..... ¼	⅝.....1¼
Posterior.....1¼.....1¾.....2	½..... ¾.....1½	¾.....1 .....½
Anterior..... ¾.....1½	⅛..... ¼	⅝.....1¼
Posterior.....1¼.....1¾.....2	½..... ¾.....1½	¾.....1 .....½
" 60 & 61 Anterior.....1½.....2	¼..... ½	1¼.....1⅜
Posterior.....1⅜.....1⅝.....1¾	⅝..... ¾.....1¼	¾..... ⅞..... ½
Anterior.....1½.....2	¼..... ½	1¼.....1⅜
Posterior.....1⅜.....1⅝.....1¾	⅝..... ¾.....1¼	¾..... ⅞..... ½

The following engravings exhibit the insertion of the capsular ligament in its normal state. The specimens which they represent were prepared by removing the entire joint from the subject and injecting the capsule with plaster of Paris. After the plaster had hardened, a trans-

verse section of the capsule was made near the edge of the cotyloid cavity, leaving the capsule attached to the neck of the bone to show its insertion. The exact location of capsular insertion, in each of the following specimens, may be found by referring to the table.

Figure 1 represents the anterior view of specimen number 1. A A exhibit the superficial

Fig. 1.

fibers of the capsule dissected loose from the deeper fibers, and reflected outward to show their insertion into the anterior inter-trochanteric line. B represents the deeper fibers of the capsule which are reflected upward on the neck, limiting the extent of the cavity lined by the synovial membrane. C is a space internal to the inter-trochanteric line, through which a fracture may occur, and yet be extra-capsular according to the following definition of an intra-capsular fracture given by Malgaigne.

"This name is given to fractures dividing the cervix within the limits of the synovial membrane, so that if this membrane were divided at the same level, the fracture would communicate at once with the joint."*

Figure 2 is a view of the posterior surface of specimen number 1, showing the insertion of its capsular ligaments.

* Malgaigne on Fractures. American edition, p. 530.

Figure 3, anterior view of specimen number 2. The dark ridge represents the anterior inter-trochanteric line. The external fibers of the capsule which have their insertion into the inter-trochanteric line have been removed by dissection, leaving that portion of the capsule which, by its reflection upward on the neck, limits the extent of the cavity of the joint.

Fig. 2.

The points indicated by the letters A B C and D, figure 3, are those from which the measurements on the anterior surface of the neck were taken in making out the preceding table. A is situated in the center of the inter-trochanteric line, at the base of the great trochanter. B is on the cartilaginous edge of the head. C is in the center of the inter-trochanteric line at the point at which the line crosses the internal angle of the shaft of the bone; and D is on the cartilaginous edge of the head. The length of the neck, on its anterior surface, was obtained by measuring—1st, from A to B; and 2d, from C to D, figure 3. The location of capsular insertion was determined by measuring—1st, from the points A and C, to insertion of capsule; and 2d, from B and D to capsular insertion.

Figure 4 exhibits the points from which measurements were taken on the posterior surface of the bone. A is situated in the center of the posterior inter-trochanteric line, at the base of the

Fig. 3.

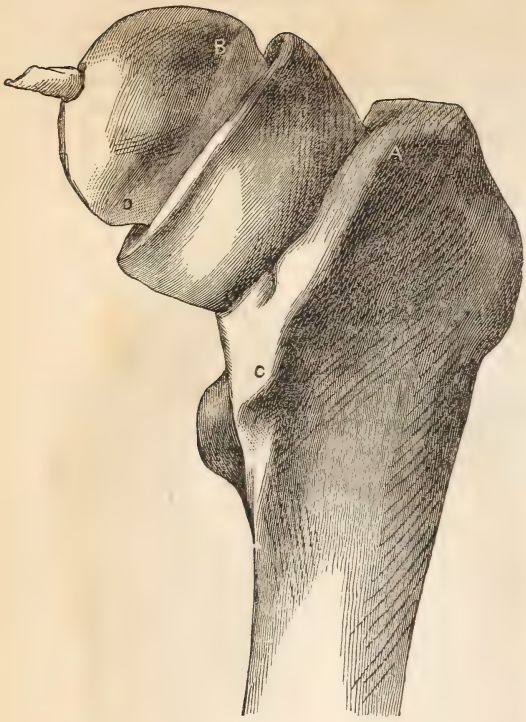


Fig. 4.

Fig. 5.

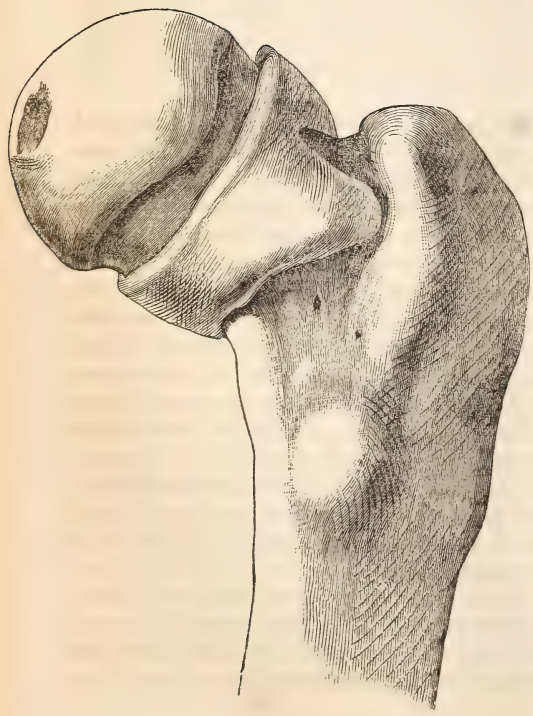


Fig. 6.

great trochanter; and B is on the corona cartilaginous edge of the head. C is in the center of the line midway between the point A and the apex of the trochanter minor; and D is on the corona. E is at the center of the apex of the trochanter minor; and F is on the corona. From these points measurements were taken in the same manner as that described for figure 3.

Figures 5 and 6 represent the posterior surfaces of specimens 3 and 4, which are the opposite femurs of the same subject. It will be observed that the insertion of the capsular ligament of one of these specimens is exactly the same as that of the other, illustrating the fact shown in the table, that the normal capsules of the opposite femurs of the same subject are identical in their insertion.

Figure 7, posterior view of specimen number 5, exhibits the capsular ligament entire, and filled with plaster of Paris. A represents the opening in the acetabular fragment through which the injection was made to distend the capsule. Specimen number 5 is the mate of specimen number 6, which, though not represented in the plates, has the same insertion for its capsule. (See table.)

Fig. 7.

Operation for False Cartilage in the Knee-Joint by Free Incision.

By Dr. L. M. Lyon,
Assistant-Surgeon, U.S.N.

John Fowler, aged forty-two, a working-man in the humbler walks of life, had suffered at intervals of four or five months, for fifteen or twenty years, with attacks of synovitis in the knee-joint, occasioned by the presence in the joint of what was discovered to be a movable cartilage. This body, however, chiefly inconvenienced the patient in walking, when it would frequently slide under the tendon of the rectus muscle, and throw him violently to the ground. These circumstances, as well as the constant uneasiness of the patient, decided him to have the body taken out, notwithstanding that the dangers and risks of the operation were duly represented to him. The operation was performed, Dr. J. L. Atkinson assisting, on Sunday, November 10th. The patient being quite tractable, the precaution of Simpson, viz., of keeping the leg extended for some days to accustom the patient to the posture, was neglected. I decided to make the incision on the external side of the joint instead of on top, inside of the rectus tendon, as advised by Cooper, believing it to be better to open the joint in that locality, which would allow of a free discharge of blood, or of pus, in case suppuration should intervene. The cartilage was found to be about the size and roughness of a walnut, inclosed in a sac, which bled moderately, and part of which was excised. It was easily detached by means of a tenaculum, and the synovia mixed with blood was allowed to flow out; the wound was then tightly drawn together, and cold applications were ordered to be

kept constantly on the limb. Union took place by the first intention, and at this time, ten days from the date of the operation, the patient is walking about his room.

A Historical Sketch of the Dance of St. Vitus, with Notices of some Kindred Disorders.

By James J. Levick, M.D.,

One of the Physicians of the Pennsylvania Hospital.

Having recently had occasion to consult some authorities on the subject of chorea, the writer was induced to investigate, more closely than he ever before had done, the early history of this strange disorder. The result of these investigations was the acquisition of information to him of a novel and instructive character, a brief resumé of which, it has occurred to him, might not prove uninteresting to the readers of this journal. Of course such a paper can lay no claim to originality, and it is offered to those merely who, from various causes, may not have access to the sources from which the facts it contains are derived. In justice to himself, however, the writer must state that without exception, unless otherwise indicated, the authorities referred to are quoted from the original communications, as found in the printed works of their authors, or in the journals of the day.

Few persons, who derive their impressions of St. Vitus's dance from the comparatively isolated cases which now present themselves, would suspect that this disease is but the feeble descendant of a powerful epidemic influence which, at one time, numbered its victims by thousands, which overspread the great countries of Europe, and which, after a triumphant career of centuries, was at last but imperfectly vanquished when the combined forces of Church and of State were brought to bear upon it.

Over what had long been the obscure history of this strange disorder a flood of light has recently been thrown by the researches of the distinguished German professor, J. F. C. Hecker, in his classical work, "The Epidemics of the Middle Ages."

Fully to appreciate this history, we must bear in mind that the adoption of the Christian faith, on the continent of Europe, was much mixed up with the idolatrous observances of that which had preceded it. A religion which came from its Divine Author as pure as the driven snow, scarcely had touched the soil of Europe before it became defiled with the mire of pagan superstition. As the temple of Jupiter, with its altars for heathen sacrifices, became dedicated to the worship of the true God, so, on the other hand, the rites and ceremonies which had celebrated the festal days of the pagan deities became transferred, in measure, to those of the Christian saints.

The reader of classical literature will readily recall to his memory the *lustration*, or sacrifice of purification, by which the Romans averted disease, freed themselves from crime, and their houses from impurity, and he will not fail to recognize its analogue in the ceremonies with which the people of the Low Countries were accustomed to celebrate the worship of St. John the Baptist; on whose day it was the custom to kindle large bonfires with bones, horns, and other rubbish, while around the crackling flames crowds of persons of all ages were dancing as if possessed, and through the flames men, women, and children jumped, and were thus protected, for a whole year, from fevers and other diseases.* This mode of celebrating St. John's day was by no means confined to the countries we have referred to. Thus we find that a similar observance of the day prevailed in Syria and in Constantinople, while we are told by the historian already quoted, that the Germans transferred to the festival of St. John's day "an ancient heathen usage, the kindling of the Nodfyr, and the belief subsists to this day, that people and animals that have passed through these flames, or their smoke, are protected for a whole year from fevers and other diseases, as if by a kind of baptism by fire." Madden,† a recent writer on this subject, states that even within his memory the festival of St. John, and the eve of it, were solemnized by bonfires, leaping through the flames, by patterns at holy wells dedicated to the saints, by music, and by dancing.

These practices, which at first were religious ceremonies of ephemeral duration, in the course of time, from the extent to which they were carried, became fearful, persistent disorders, affecting great numbers of people, and producing consequences of the most distressing kind. That such should have been the result need not sur-

---

* See the Epidemics of the Middle Ages. From the German of J. F. C. Hecker, M.D., etc. Translated by B. G. Babbington, M.D., etc. London, 1846. Sydenham Soc. Coll.

† Phantasmata, or Illusions and Fanaticisms, etc. By R. R. Madden, F.R.S., etc. London, 1857, p. 407, vol. i.

prise us, when we learn what were the physical and mental conditions of those who became the victims. The fatal pestilence known as the Black Death, or Plague,* by which, in the brief space of a few years, twenty-five millions of people perished, had just subsided; calamities of the most fearful character prevailed: great floods had devastated the country, driving the wretched inhabitants from their homes in the midst of an inclement season. The semi-civilized feudal lords were constantly engaged in predatory incursions upon their weaker neighbors, despoiling men of their property, women of their virtue, and rendering insecure all that makes life desirable. As if to confirm the apprehensions, which then existed, of an approaching destruction of the world, the walls of the ancient City of Cologne had, to a great extent, fallen down. Thus, with pestilence, pillage, and poverty upon them, it is no wonder that the frantic celebration of St. John's day only served to bring to a crisis a malady which had long been impending.

While the wild revels of St. John's day were without doubt the immediate exciting cause of the disorder we are considering, there were other causes than those we have mentioned which predisposed to its development. As early as the year 400 of our era, the practice of *self-flagellation* as an atonement for sin appears to have prevailed to some extent among Christians, derived, no doubt, from the tradition of similar modes of penance which had existed among their pagan ancestors. This relic of barbarism seems to have met with varying favor from the date mentioned, as it had the approval or condemnation of the church: thus it appears to have prevailed to a considerable extent in Italy about the year A.D. 1260, but it was not until the middle of the fourteenth century (1349) that it received a fresh impulse, doubtless from the morbid feelings which the fearful pestilence then prevailing had engendered.

At that time, we are told by Hecker, an awful sense of contrition seized Christians of every communion; they resolved to forsake their vices, to make restitution for past offenses before they were summoned hence; to seek reconciliation with their Maker, and to avert, by self-chastisement, the punishment due to their former sins. From other sources* we learn that these feelings produced the sect of Flagellants, who are described as "penitent fanatics and hypochondriacs (*atrabiliares*) who flogged themselves unmercifully, and who attributed to this flagellation more of virtue than to the sacraments, in effacing sin." This "Brotherhood of the Flagellants," or, as they were also called, the Brethren of the Cross, took upon themselves the repentance of the people for the sins they had committed, and offered prayers for the averting of the plague. At first chiefly composed of the lower class,† they were soon joined "by many nobles and ecclesiastics," and at one time such was the popular enthusiasm that they numbered 10,000 in their ranks. They marched through cities in well-organized processions, with leaders and singers, their heads covered as far as their eyes, their looks fixed on the ground.‡ Their dress consisted of a black garment with a red cross on the back, another on the breast, and a third on the cap. Tapers and beautiful banners of velvet and gold were borne before them wherever they went in bodies, and each Flagellant carried a scourge with three lashes, each one tied in knots, into which were inserted pieces of pointed iron. They did penance twice a day, morning and evening, going abroad in pairs, singing psalms, and on arriving at the place of flagellation they stripped the upper part of their bodies, put off their shoes, and applied the scourges with such violence that blood flowed from their wounds.§ This strange delusion, which, when at its height, numbered its followers to such an extent that, in the language of the German professor, they "presented the appearance of a wandering tribe," did not for a long time lose its hold on its slaves. Even now its prominent dogma is not without advocates, and so late as 1843, Madden tells us, the Flagellant processions, merged into those of the Penitents,

*In A brief History of Epidemics and Pestilential Diseases, by Noah Webster, London, 1800, vol. i. p. 217, it is stated that this plague was so deadly that at least half or two-thirds of the human race perished in about eight years. In the East twenty millions perished in one year. In England cattle were neglected, and ran at large; the corn perished in the field, for want of reapers, whole villages were depopulated, houses mouldering to ruin. Volcanic eruptions, comets, earthquakes, inundations, destroying at one time thirty-three villages: swarms of poisonous flies, etc., are recorded by Webster.

* Histoire des Egaremens de l'Esprit Humain, tome ii. p. 62. See Madden, (op. cit.)

† Regnier, a hermit of Perugia, is recorded as a fanatic preacher of penitence with whom this extravagance originated. (Vide Hecker, op. cit.)

‡ Hecker.

§ See "The History of Medicine, comprising a Narrative of its Progress from the Earliest Ages to the Present time," etc., by Edward Meryon, M.D., F.R.C.S., p. 208, vol. i. London, 1861.

were continued in Lisbon on Good Fridays. Confraternities of penitents, bearing large crosses, walked then attired as of old, but without the whips or any scourging in public. The disarmed Othellos of the Flagellant Brotherhood were there, but their occupation was gone.

It was in the midst of events and scenes such as have been referred to that the festival of St. John the Baptist was celebrated in the year A.D. 1374; and with such influences, we are not surprised to learn that, soon after this celebration, "great crowds of men and women were seen at Aix-la-Chapelle who had come out of Germany, and who, united by one common delusion, exhibited to the public, both in the streets and in the churches, the following strange spectacle. They formed circles, hand in hand, and appeared to have lost all control over their senses, continued dancing, regardless of the by-standers, for hours together in wild delirium, until at length they fell to the ground in a state of exhaustion. They then complained of extreme oppression, and groaned as if in the agonies of death, until they were swathed in cloths bound tightly around their waists, upon which they again recovered, and remained free from complaint until the next attack. This practice of swathing was resorted to on account of the tympany which followed these spasmodic ravings; but the by-standers frequently relieved patients in a less artificial manner, by thumping and trampling upon the parts affected. While dancing they neither saw nor heard, being insensible to external impressions through the senses, but were haunted by visions, their fancies conjuring up spirits whose names they shrieked out; and some of them afterward asserted that they felt as if they had been immersed in a stream of blood, which obliged them to leap so high. Others, during the paroxysm, saw the heavens opened and the Saviour enthroned with the Virgin Mary, according as the religious notions of the age were reflected in their imaginations. Where the disease was completely developed, the attack commenced with epileptic convulsions. Those affected fell to the ground senseless, panting, and laboring for breath. They foamed at the mouth, and, suddenly springing up, began their dance amid strange contortions. Yet the malady doubtless made its appearance very variously, and was modified by temporary or local circumstances, whereof non-medical contemporaries but imperfectly noted the essential particulars, accustomed as they were to confound their observation of natural events with their notions of the 'world of spirits.'"* Throughout the towns of what is now Belgium, over the Netherlands, and elsewhere, this strange epidemic spread with frightful rapidity. With their waists girt with cloths, and with garlands in their hair, five hundred dancers appeared in Cologne, and eleven hundred in Metz. Religious houses were eagerly resorted to, and under the impression that it was the work of the evil one, the priests and other church dignitaries were earnestly applied to for help. Hence prayers, masses, and exorcisms became the chief means of relief to these unhappy victims of a disordered imagination. Causes the most trivial were supposed to exert great influence in producing or increasing this malady: thus the sight of one weeping, of red colors, and even of the pointed shoes then in fashion, were the means of highly aggravating an attack. The feelings toward the priests soon ceased to be those of entreaty and of hopeful faith. Threats and accusations against them, as in some way connected with the cause of their condition, began to take the place of prayers and devotion.

Nor can we wonder such should have been the case. Even then traditions were current that similar disorders had been produced by priestly imprecations. Thus it was an accepted belief that in the year 1027, near the convent church of Kolbig, near Bernburg, eighteen peasants were disturbing divine service on Christmas eve, by dancing and brawling in the churchyard, whereupon the priest Ruprecht inflicted a curse upon them, that they should dance and scream for a whole year without ceasing, which curse was completely fulfilled; and though at last they were released by the interposition of a pious bishop, four of them died, and the rest continued with a trembling of the limbs all their lives.† Indeed, not only demons, priests, but even their fellow-men were thought capable of inflicting this terrible curse; so that a little later it became a malevolent expression toward an enemy, in common use, "*Das dich Sanct Veitstanz ankomme,*" "May you be seized with St. Vitus's dance!"

Finding that their own prayers and exorcisms were not always effectual, or, what explained their

---

* See Hecker, op. cit., page 87, et seq

† Hecker, op. cit.

failure, that the deluded people had lost confidence in their efficiency, the holy fathers had recourse to the powers of the sainted dead, and having ingeniously assigned to St. Vitus or St. Weit, the tradition that "just before he bent his neck to the sword he had prayed that he might protect from the dancing mania all those who would properly solemnize the day of his commemoration; and that therefore a voice was heard from heaven saying, Vitus, thy prayer is accepted!"—his shrines became the resort of the dancers of St. John, and his name irrevocably associated with the disease and its various modifications.*

In a work, recently published, entitled *Phantasmata, or Illusions and Fanaticisms, etc., by R. R. Madden, F.R.S., etc., London*, 1857, the author quotes the *Annales de Flandes, per Emmanuel Sueyro*, (in Spanish,) who, under date 1374, (contemporaneous with the events recorded above,) speaks of a great multitude of people who went dancing and singing through the town in troops of a hundred and fifty. (*Vide op. supra*, p. 379, *et seq.*) The same writer gives the following detailed history of St. Vitus: "He was the son of Hylas, a Gentile magnate, and was born in Mazara, Sicily, in the time of Diocletian. While yet a child, he manifested extraordinary piety; and even in childhood began to work great miracles, healing the sick, casting out devils, and doing such other wonderful things; for God had chosen him, from that most tender age, to manifest His glory in him, and by him. He was rescued out of the hands of persecution by Modestus and Crescentia; and finally conveyed to Rome. The great fame of St. Vitus for sanctity and miraculous gifts made him known to the Emperor Diocletian, who availed himself of the signal spiritual gifts to rescue a child of his from the power of the demon by whom that child was possessed. By the prayers of St. Vitus the child was delivered from the evil spirit, as we are informed; but the young saint refusing the proffered favor of the emperor, and the conditions on which it was offered, namely, that he should abjure Christ, and adore the gods of paganism, he was cast into prison in Lucania with Modestus and Crescentia. The emperor finally ordered them to be thrown into a cauldron of boiling pitch and other inflammable compounds to see whether their God would deliver them out of his hands. Signing the cauldron with the sign of the cross, they entered it in a holy transport of hope and joy, singing praises and hymns to God; and they came forth unhurt in the presence of twenty thousand people. Diocletian then ordered them to be put to death on a scaffold, stretched on the Castata, where they endured the most frightful torments. These had not ceased before a tempest and earthquake ensued, which buried several temples, and killed many of their worshipers. The emperor fled in consternation, and acknowledged that he was overcome by a Christian boy. Then appeared an angel of the Lord, who delivered the confessors from their torments, and carried them to the banks of a river and placed them under a tree; and there the martyrs gave up their souls to God on the 15th of June, A.D. 303, and were honorably buried. * * * The body of St. Vitus was moved to Apulia in 682, afterward to St. Denis in France, and in 836 to the abbey of Corvey in Saxony. Some of the relics in 775 had been obtained by Wenceslaus, King of Bohemia, and enshrined in a church built to his honor in Prague. The power ascribed to St. Vitus, of casting out devils and performing miraculous cures, was the cause of the trust reposed in his intercession, and the recourse to it of those afflicted with a disease generally considered of supernatural origin in the fifteenth century. The festival of St. Vitus occurs on the 15th of June."*

The cures effected at the shrine of St. Vitus, by protracted dances, by prayers, by almsgiving, and other devotions, were not always permanent, and hence it became the custom to make an annual pilgrimage thither to prevent a recurrence of the disorder; and it is stated that throughout the month of June these pilgrims were found in a restless and nervous condition. The disease became less and less frequent, and instead of affecting great numbers of people, it gradually became limited to a few individual cases. Even in the days of Paracelsus it had lost many of its peculiar symptoms, and presented the features we now recognize as those of simple chorea, (*χορεία*, a dance,) which name we retain, although dancing forms now no necessary part of the disorder. All modern writers on chorea quote the statement that Horstius,† as late as the spring of 1628, saw

* Hecker, op. cit.

* See Lives of the Saints, from the Spanish of the Rev. Father Peter Ribadeneira, third edition, Dublin, 1763, p. 270, second part.

† Gregorii Horstii Senioris opera medica. Gondæ, 1661.

women who annually performed the pilgrimage to St. Vitus's chapel, in the territory of Ulm, as well as that of Felix Platerus, (1641,) who records that the authorities of Basle commissioned several powerful men to dance with a girl who had the dancing mania, which it is said they did for four weeks before she was cured.

A recent writer states that the dancing mania of Germany, of the fifteenth century, is still kept in popular remembrance in some places by an annual festival, especially at Echternach, a small town in Luxembourg, about twenty miles from Treves, where thousands of people annually meet on Whit-Tuesday to solemnize this feast with what is called "the jumping procession," and also the procession of the jumping saints. On Whit-Tuesday, the procession still wends its way to the grave of St. Willebrodus, in the ancient abbey church of Echternach. The procession starts from the bridge accompanied by several bands of music. The pilgrims of both sexes form in rows, and spring, first four steps forward and three back, then eight forward and three back; so on, continually increasing the steps forward but making no change in those backward, until they reach the church, where they throw themselves on their faces and begin to pray. Having entered the church, after prayer, the flag-bearers and brothers of the order place themselves under the great luster, with its seventy-two lighted tapers, and high mass, accompanied by solemn music, begins. * * This jumping march is performed to curious old music, composed expressly for this ceremony. So many evils arose, from bringing such masses of people together in so small a compass; so much drunkenness, riot, and debauchery, that the festival was suppressed by law in 1777. It was, however, reintroduced by Joseph II., in 1790; put down by the French in 1795; and again appeared in 1802, in which year there were nearly 3000 dancers and 74 musicians. In the year 1812, there were 12,678 dancers in the procession, which has, however, now diminished to an annual average of 8000.*

Traces of analogous disorders may be found marking the path of succeeding centuries down to the present time.

Thus, immediately subsequent to the dance of St. Vitus, if not, indeed, contemporaneously† with it, there arose another dancing mania known as *Tarantismus*, from its supposed origin in the bite of the *tarantula*, a kind of spider which abounded in Italy.* Persons thus bitten became melancholy, stupefied, and lost their senses. "This condition," says Hecker, "was united with so great a sensibility to music, that at the very first tones of their favorite melodies, they sprang up, shouting for joy, and danced on without intermission until they sunk exhausted and almost lifeless." In this way it was supposed that the poison of the viper was distributed over the whole body and expelled through the skin; yet, if there remain the slighest vestige of it in the system, the germ was capable of renewing the disorder so that the dancing fits might again be renewed indefinitely by music. Kircher states that it was the action of the poison in the human body which excited a desire for the sounds of musical instruments, and for harmony proportioned to the discords of the nervous systems of the sufferers. According to this writer, it would appear that a sort of incubative stage existed, and that it was not until the heat of summer that the characteristic symptoms of the disorder displayed themselves.

While the fear of the tartantula seems to have affected all classes of people so that the bite of the most harmless insect inspired the greatest terror, and induced in systems predisposed by the causes we have formerly mentioned, the most alarming nervous symptoms, yet, by a strange perversity of the human mind, there would appear to have been blended with the terrors of the disease such an enjoyment of the music and the dance that the periodical occurrence of the days on which bands of musicians who traversed Italy for the cure of those affected with tarantism was looked forward to with pleasure, and the occasion was known as "the women's little carnival," the women, as we are told, throughout the country saving up their spare money to reward the welcome musicians.

Perhaps the most satisfactory writer on tarantism, and one who has been but little quoted on the subject, is the celebrated *Dr. Georgius Baglivi*, Professor of Physic and Anatomy at

---

*Madden, loc. cit., quoting Notes and Queries, Sept. 1856.

† "Gariopontus, a Salernian physician, (a native of the Kingdom of Naples,) was the first to describe a kind of insanity, (*anteneasmon*, the *enthusiasmus* of the Greek physicians,) the remote affinity of which to the tarantula disease is rendered apparent by many striking symptoms."

* Madden, op. cit., following Kircher, derives the name tarantula from the City of Tarento, or from the River Thara, in Apulia, in the vicinity of which those venomous spiders which produce the dancing disease abound.

Rome. In November, 1695, he published at Rome "A Dissertation on the Anatomy, Bitings, and other Effects of the Venomous Spider called the Tarantula," in which he not only describes the disease, its symptoms, and its cause, but also gives a finely-executed engraving of the spider itself. This work, which was translated into English in the year 1714, may be found in the library of the Pennsylvania Hospital, and will well repay the reader for its perusal. Baglivi, deriving the name of the tarantula from Tarentum, an ancient city of Magna Græcia, upon the Ionian shore, states that "those who are once bit with it are never quite cured of the Venom, for it revives every Year, and occasions a long series of Evils which would be very annoying to the Patients if they did not take due care of their Health by Dancing and Balls." He believes the bite to be venomous only in Apulia, and that especially so in summer. He, too, speaks of the delight with which the women looked forward to their "little carnival." He attributes the good effects of music and dancing "to the very swift motion communicated to the Spirits and Blood which dissolves and dispels their growing Coagulation, until at last the humors retrieve their primitive fluid state by virtue of these repeated shakings and vibrations."

It is not the intention of the writer to go into a further account of this strange disorder; it has been alluded to merely from its relation to the dance of St. Vitus, which, in some respects, it closely resembles; and from the previous occurrence of which, and the wild example of whose votaries, it is altogether probable its association with music and dancing was derived. Yet tarantism for several centuries prevailed, and has left its memorials in the music of the tarantella, which is even now fondly cherished by the people of Southern Europe. *Tarantism* was at its height in Italy in the seventeenth century, long after the St. Vitus dance of Germany, as an epidemic, had disappeared.*

In the remarkable religious fanaticisms which prevailed during the sixteenth century, the entire history of which is replete with interest, there are to be found the records of extravagance of conduct closely resembling that of the votaries of St. John. Such was the case with the Anabaptists, a religious sect which appeared A.D. 1521, the first Protestant dissenters from the doctrines of Luther. They have not inaptly been called "the Radicals of the Reformation," which they regarded "as too contracted, not spiritual enough, nor sufficiently sublime." It is said that in Zurich, the Anabaptists ran about the streets with sacks upon them, and girded with ropes and switches, crying out that in a few days the town would be destroyed, "Woe to thee, Zurich! woe, and woe again!"

These deluded people, like the dancers of St. Vitus, drew after them great crowds, who soon joined their ranks.

Madden tells us that the Anabaptist prophets appeared to be affected with epilepsy, (more probably with hysteria.) In these paroxysms of enthusiasm a great change came over their features. At times they fell on the ground, twisted their mouths, rolled their eyes, and appeared to be in converse with some devil. They went to the tops of houses, on the precipices of high rocks, and thereon mounted, cried out to the people to amend their lives. When the armed forces of their sovereign were sent against them, they in no way defended themselves, nor attempted to save themselves by flight, but sang a hymn, invoking the Holy Spirit, and, waiting in vain for some help from on high, were mercilessly cut in pieces.

No one can read the history of these deluded people without a saddened heart. That many, if not most of them fully believed what they pro-

* While the dancers of St. Vitus abhorred red colors, the victims of tarantism exhibited a special affection for the same. Thus it is told of a certain Capuchin friar affected with the dancing fits, who was visited by a Cardinal Cajetano, that he was so distressed by the refusal of the spectators to allow him to touch and examine the red garments of the Cardinal, that he sunk into a deep swoon, from which he did not recover until the Cardinal compassionately gave him his purple cape.

Before entirely passing from this subject, I may, perhaps, be pardoned for quoting in full the following beautiful and descriptive paragraph from Hecker. Referring to tarantism, he says: "Another no less extraordinary symptom was the ardent longing for the sea, which the patients evinced. As the St. John's dancers of the fourteenth century saw, in the spirit, the heavens open and display all the splendor of the saints, so did those who were suffering from the bite of the tarantula feel themselves attracted to the boundless expanse of the blue ocean, and lost themselves in its contemplation. Some songs which are still preserved mark this peculiar longing, which was moreover expressed by significant music, and was excited by the bare mention of the sea. Some, in whom this inexplicable susceptibility was carried to the greatest pitch, cast themselves in blind fury into the blue waves, as the St. Vitus dancers occasionally did into rapid rivers. This condition, so opposite to the frightful state of hydrophobia, betrayed itself in others in the pleasure afforded them by the sight of clear water in glasses. These they bore in their hands while dancing, exhibiting at the same time strange movements, and giving way to the most extravagant expressions of their feelings."

fessed, cannot be doubted. They sealed their testimony to its truth with their blood. Neither the faggot, nor the sword, nor the halter intimidated them. Some were burned, some were dreadfully mutilated, many were hung, others were drowned, but to the last they remained steadfast in their faith. Nay, more, there can be no doubt that many of the doctrines which they as a sect first proposed, were in strict accordance with the purest and most spiritual precepts of the Gospel, and, as such, have been adopted by evangelical Christians of later days. But these glimpses of heavenly light were lost sight of in the blaze kindled by the fires of their own heated imaginations. Liberty of thought became with them licentiousness, and its results were seen in practices which, under the name of religion, were worthy only of madmen or of devils. Their whole history is but another sad example, to show us how thin are the partitions which divide wit from madness.

For nearly a whole century this fanaticism existed and flourished.

The French Calvinists or Camisards, who appeared near the close of the seventeenth century, were also the subject of ecstatic movements. Thus it is related of their elderly priestesses, that they fell down, struggled for a few seconds in a convulsive way, and, foaming at the mouth, began to prophesy enthusiastically. Later it is said of them, that thousands of women persisted in prophesying, and in singing their inspiration. In an entire town all the women and girls appeared possessed by devils. They trembled and prophesied publicly in the streets.

Brueys, who is quoted on this subject, tells us that the whole body was agitated by a kind of shuddering. The intensity of the fits varied: they called those *trembleurs* who only experienced convulsive shocks in the head, the shoulders, the legs, and the arms. Some fits were sufficiently violent to throw down a patient when he least expected it.

In the City of Paris, about the year 1730, and later, great crowds of people are said to have frequented the tomb of Deacon Francois de Paris. This Francois appears to have been a humble-minded Christian, who gave up position and wealth to devote himself more closely to religion. In the discussions which at that day affected the Church, Francois was known as an advocate of the doctrines of Jansenius, Bishop of Ypres. His tomb became the resort of many whom he had succored during life, and before long numerous cures were reported to have occurred at this place, of the most miraculous kind. Hence it soon became the resort of thousands. The sick were laid upon the tomb, and soon after, they were seized with violent pains, agitations of the body, and extraordinary convulsions, by which they were gradually healed of their maladies. Other extravagancies of conduct might be referred to, did the limits of this paper permit. These miracles, performed before the Parisian public, were made the means of establishing the doctrines of Jansenius, and the subjects of them are known in history as the Jansenist Convulsionnaires.

To be continued.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. Gerhard.

December 14, 1861.

TYPHOID FEVER—RELAPSE.

This man, after having become convalescent from an attack of typhoid fever, was permitted to go out of the hospital four days ago. We were unwilling to discharge him, fearing the consequences, but he desired to visit his friends in New Jersey, and we yielded to his importunities. He did not go to New Jersey, however, but went up town, where, at a restaurant, he ate pretty freely of buckwheat cakes and sausage, and soon after was taken worse, his bowels becoming irritable, and diarrhœa supervening. In four days from his discharge he returned to the hospital again. He now has some cough; his tongue is dry at the tip, coated posteriorly; intellect clear; pulse 100, frequent; skin warm; and has some fever. His bowels were open twice last night, not at all today; abdomen slightly tympanitic, but not much tumefied; sudamina appeared yesterday in his groins, and some five or six rose-colored spots are visible higher up; has slight diarrhœa; spleen and liver not enlarged; lungs have a light trace of sonorous and mucous rhonchus, latter at lower portion, former at upper. There is much prostration and loss of strength.

There is great danger, in these cases of typhoid fever, from allowing the patient to go out too soon. There is, sometimes, a morbid appetite developed, a desire to eat, which is not real, and which craves, most of all, that which should not be given, viz., solid food. An error in diet in this stage may produce an irritation of the bowels, more or less extensive, as the colon, ilium, or jejunum, or all together, are affected, resulting in

ulceration or perforation. And then, again, incipient phthisis may be developed. So that you should always exercise the most assiduous care in this matter, that, during the progress of convalescence, no untoward result may occur.

Treatment.—For the diarrhœa he may take one-fourth of a grain of opium, with one grain of tannin, every three or four hours, as the persistence or continuance of the diarrhœa requires. I regard this prescription as one of the best that can be used in this affection, or in a hemorrhage from the lungs; and prefer the tannin to acetate of lead, which is usually given. Relatively the opium is the most valuable; tannin has a certain degree of value, the lead very little. If his cough persists, apply a small blister (one 2 by 3 the best) upon the chest, and he should take the spirits of mindererus at night. His diet should consist of beef-soup, arrow-root, with small pieces of bread soaked in it; porter twice a day.

EMPHYSEMA OF LUNGS.

This man is fifty-four years of age; has had a cough about three years, which disappears in the summer, coming on again in the fall, about September. You observe the anxious expression of his countenance, and his somewhat emaciated appearance; he has great dyspnœa; cannot walk up stairs without putting him very much out of breath; expectorates a muco-purulent matter. Now this cannot be a case of simple phthisis, for we do not find dyspnœa occurring in its early stages, neither do the physical signs denote it; nor is it bronchitis—there is not the flushed surface, the fever, nor the peculiar difficulty of inspiration, which exists in that disease. The inspirations in this case are full and strong, but the chest falls but little on expiration. Nor yet is there any violent disease of the heart, as hypertrophy. We have here emphysema of the lungs, which may be an effect of asthma, and not a cause. And yet asthma is, sometimes, itself a symptom, produced by derangement of the nervous system. What do we expect to find in emphysema? In young persons, of twenty-four or twenty-five years of age, we find marked dilatation of the chest, not confined to one side, as in pleurisy, but a general roundness and fullness, most obvious in front. In those of more mature years, the dilatation is confined more particularly to the intercostal spaces, widening them, and sometimes causing them to bulge out. Upon auscultation, we find the sibilant and sonorous rhonchus, sometimes the mucous and submucous. We also find a feeble respiratory murmur, and a feeble vesicular sound. Percussion gives an unusually clear resonance, different from health, more gaseous; apparently, perhaps, from the dilatation of some vesicles, and contraction of others. This sound is not, as in health, increased by respiration.

Now this succession of symptoms we have well marked in the case before you: the dilatation of the chest most marked upon the right side; the clear resonance everywhere over the chest upon percussion; the feeble vesicular sound on both sides; the mucous rhonchus at the lower anterior, and the mucous, sonorous and sibilant rhonchus at the posterior portion of the lungs; the latter of which may be occasioned by variable contraction in the finer ramifications of the air-cells. These symptoms all indicate that, from some cause, the tissue of the lungs is morbidly distended with air, which, on account of the inelastic, rigid, or thickened condition of the membrane lining the air-cells, is not expelled at each respiration. The air-cells thus become permanently distended, forming that affection which we denominate emphysema.

Now, what is the treatment proper to be pursued in this disease? The best remedy, in my opinion, is the tincture of lobelia, in doses of two-thirds of a drachm, four times a day. Or, if cough be persistent, a mixture, containing morphine, squills, and ipecac., in suitable proportions to the age of the patient, may be given. Dry cups may also be used with advantage. Blisters should be avoided, if possible.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC.

Service of Prof. Gross.

November 30, 1861.

FRACTURE OF THE CRANIUM.

A young child, presented by its mother for a tumor on its head, occupying the parietal prominence above the ear, and reaching down to it, about the size of the palm of the hand; fluctuating; parts sensitive. On pressing down upon it the finger comes in contact, apparently, with roughened edges of bone, indicating a fracture of the bones of the cranium at this point, and that the effusion or extravasation of whatever character it may be, drops underneath the bone. This tumor was not noticed by the mother until Sunday last. The child is in good health; nurses well; has had some fever the last ten days. On examination with the exploring needle, which should always be used in cases where any doubt exists in regard to the contents of a tumor, especially of the head, we find the tumor contains no pus, but blood. It is, therefore, a contused wound, with extravasation of blood between the surface of the skull and pericranium, and occasioned, no doubt, by a fall, which the mother now calls to mind. If there had been pus in it, an opening for its exit would have been necessary; no incision is now required. The following application should be made, with a view to promote absorption of the extravasated blood:—

℞.—Ammoniæ hyd. chlor. ʒij;
Aquæ, qt. j;
Acidum acet. ʒij. M.

Apply warm, covering the part with flannel, and this with oiled silk. Give also castor-oil to keep the bowels free. If the extravasated blood be not deprived of its vitality, the absorbents will

readily take it up; if it be, it will act as a foreign substance, producing, it may be, serious results.

This case was presented the second time, December 7th, when the diagnosis made November 30th was confirmed by the marked elevation and depression of the extremities of the fractured bone. The rapid absorption of the extravasated blood which had taken place, rendered the depression real which is sometimes only apparent. The fall which occasioned the fracture was followed by no marked symptoms except a slight concussion from which the child soon recovered. The bone will probably resume its natural position under the recuperative powers of nature, which are very strong in children. With careful watching, therefore, to prevent any untoward symptoms, aided by a continuation of the remedies already prescribed, nature may be left to effect the cure.

December 4, 1861.

Service of Prof. Pancoast.

WRY NECK.

The deformity in this case was very great, the head being turned strongly toward the left shoulder and somewhat downward. About one year ago, as the boy was running at play, he fell and wounded his neck. The wound was dressed with adhesive strips, to which the twisting of the neck was attributed by the friends, as it was not noticed before they were put on. As an illustration of the fallacy of such ideas, the lecturer related the story of Goodwin Sands and the Tenterden steeple. This deformity was not occasioned by the adhesive strips, nor was it produced, as is usually the case in wry neck, by the contraction of the sterno-cleido mastoid or trapesius muscles. There was either a fracture or a dislocation of the cervical vertebræ, and the wonder is that the child's life was not destroyed at once. The distortion was immediately noticed, but no efforts made to remedy it; the same sort of deformity is occasionally produced by a softening of the vertebræ. An attempt now to reduce the dislocation might be followed by fatal results, but as the sterno-cleido is put upon the stretch by the attempt to bring the head into its proper position, it should be divided, and then the employment of some mechanical appliances may palliate the deformity.

TALIPES VARUS, (*with a new operation.*)

The operation for club-foot is often unsatisfactory in its results. The division of the tendo Achillis does not always remedy the deformity, because it is not in every instance at fault, as a reference to the anatomy of the part will at once explain. The *gastrocnemius*, the beautiful muscle so characteristic of this region of the body, arises by two heads from the upper part of the two condyles of the femur; passing along down, the two divisions unite to form the tendo Achillis, by which it is inserted into the lower part of the posterior tuberosity of the os calcis. Arising from the head and upper half of the fibula, and from the middle third of the tibia, is the *soleus*, which is also inserted into the tendo Achillis. Now in club-foot we commonly find the gastrocnemius flaccid and soft, indicating that it is not put upon the stretch to give rise to the contraction which produces the deformity; but if we grasp the insertion of these muscles into their tendinous extremity, we find a hard mass, the soleus, by its oblique and extended insertion into the tendon, antagonizing the gastrocnemius and drawing the os calcis upward. What more philosophical, then, than that the division of this muscle at its insertion should allow the heel to assume its normal position, and the cure be rendered complete by the inferior extremity of the soleus attaching itself to the tendon at a higher point? This has long been a favorite operation of mine for talipes varus, and one which I shall perform in the case now before you. You observe the flaccidity of the gastrocnemius, you observe also the tension of the soleus; a division of the latter will give proper play to the former, allow the os calcis to resume its proper position, and remedy the varus without subjecting the child to the loss of any portion of that important tendon in locomotion, the tendo Achillis, or to the risk of a failure in cure. But care must be exercised in performing the operation. The knife must be turned toward the tendon to avoid wounding the popliteal artery. When the soleus is divided, the club-foot apparatus should be applied as in division of the tendon, and the case treated in the same manner, not, however, making any movements of the divided muscle for the first five days.

December 14, 1861.

Service of Prof. Gross.

ARTICULAR RHEUMATISM.

J. L., thirty-two years of age, presents himself for an affection of the wrist articulation of over one year's standing. His general health is good; works in a brewery, and drinks porter and ale. The disease first affected the forefinger, and then by turns each finger of the right hand, till it ultimately settled in the articulation of the wrist, producing great swelling around that joint, heat, redness, inflammation, suppuration, and the discharge of serous matter, but no pus. The sinus opens into the joint, and there may be necrosis of the cartilage, and, perhaps, of the bone. It is affected by changes of weather, causing pain and increased swelling. The motion of the wrist is not greatly affected. There is no specific taint, nor is the affection of a strumous character—that being more common in early life. It is an obstinate case, and may be denominated articular rheumatism. In the treatment of this case, our first injunction is, that the patient shall take no porter or ale, eat no meat or hot bread; he may have a milk diet. There is structural lesion here which ought to have been met in the outset with copious venesection. He should now be bled

freely and have a purgative, after the operation of which he may take every night, for a week, the following mixture:—

℞.—Vini colchici, f3j;
Liq. morphiæ sulph. f3ss. M.

During the administration of this remedy, he may need a mild aperient, unless his bowels are free. As a local application, use acetate of lead and opium, applied warm upon flannel. Entire rest of the part should be observed; indeed, rest is indispensable; without it untoward results may be expected.

UNUNITED FRACTURE.

This was the case of a young man, twenty-four years of age, who, five months ago, met with the accident of an oblique fracture of both the left tibia and fibula, the former at the middle third, the latter, as is often the case in fractures of both these bones, a little above that of the tibia. The tibia is still ununited, and the upper fragment is quite sharp. The fracture was oblique, downward and outward. In treating fractures, the great aim should be to restore the bones to their natural position, to place them in exact apposition, and to retain them in their place. If not done, imperfect union or entire want of it will be the result. The more accurately the bones are apposed, and the more entirely they are kept at rest by means of apparatus for extension and counter-extension, the more speedy and perfect will be the cure.

Among the causes which may occasion want of union in fractures, may be mentioned the long-continued use of cold applications; the interposition of a clot of blood between the ends of the bones operating as a foreign body, or a portion of muscle, aponeurosis, spiculæ of bone, or a bullet; constitutional debility, profuse discharges, syphilitic taint, cancerous or tubercular diathesis, any one of these may occasion the non-union of fractures. In ordinary cases, fractures should become firmly united in five or six weeks. In this case the union which has taken place is fibrous.

The remedies for non-union of fractures are various. When depending upon constitutional or specific taint, the appropriate remedies for such condition should be used; if upon anæmia, good diet, tonics, as quinine and iron, free ventilation, friction of skin, etc.; if from inaccurate apposition, the proper adjustment of mechanical apparatus should be made, that the bones may be kept *in situ*. Should, however, none of these means succeed, the ends of the bones may be rubbed together to produce inflammation and the exudation of lymph, the necessary prerequisites for the formation of bony union; or pressure may be applied, the part painted with iodine solution, a blister applied, or, instead of this, a perforator may be introduced to break up the fibrous tissue —the object of each method proposed being to excite inflammatory action in the parts—or the operation of Dr. Physick may be employed in the introduction of a seton between the ends of the bone. In some instances this operation has been entirely successful, in a few instances unavailing and fatal. Or that of Dieffenbach, of Berlin, which consists in puncturing the skin and inserting ivory pegs between the ends of the bone, an operation which is exceedingly simple and effectual. As a last alternative resection may be performed. In this case I propose to perform the operation of Dieffenbach, inserting ivory pegs into the parts.

Medical Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Reported by William B. Atkinson, M.D., Recording Secretary.

Wednesday Evening, October 9th, 1861.

PUERPERAL CONVULSIONS.

Dr. Condie remarked that the abstract given, in the paper read before us this evening, of the different opinions entertained by the leading obstetrical authorities of the present century in respect to the pathology and therapeutics of puerperal eclampsia, presents strong evidence of the little positive knowledge we possess of the true character and causes of the disease, and how little has been acquired as to its successful treatment.

Few affections of ordinary occurrence have been the subject of so much "false experience"—the theory and management of which have been inferred from a more insufficient, one-sided, badly-interpreted series of observations.

The same mistake has been made in respect to puerperal eclampsia as in the case of puerperal fever—in assuming that it is an affection peculiar to the puerperal state. The common impression is, that the convulsions which occur during gestation and parturition are so intimately dependent upon the presence of the child in utero or upon the act of parturition, that so soon as the latter is concluded and the child and secundines expelled, they cease.

If nothing more were required for the production of convulsions in the female than pregnancy or labor, we should certainly expect to meet with them much more frequently than we do, considering the frequency with which the conditions upon which they are supposed to depend occur; and never in the absence of those conditions. Now, that gestation and parturition may proceed regularly until their final completion, and convulsions, nevertheless, set in a short time subsequently, is a fact of which every obstetrician is perfectly aware.

It is said that carefully compiled statistics show that convulsions occur most commonly during first labors. Let this be as it may, our own experience does not bear out a similar conclusion. We have found them to occur with as much frequency during second and third as

during first labors. When they make their appearance during a first pregnancy or labor, our observation has shown that there is a liability to their occurrence during the same conditions subsequently.

The females most prone to the attack of puerperal convulsions are generally described to be young and robust, who are decidedly plethoric, with short necks, and the other indications of an imminent apoplectic tendency. This does not correspond with our own experience. The great majority of the attacks of puerperal eclampsia witnessed by us have occurred in women of a lax, leuco-phlegmatic habit, or in whom the abdominal organs predominated.

When the fact was first discovered of the frequent, if not constant presence of albuminuria in at least the more severe forms of puerperal eclampsia, it was supposed that the true key to the pathology of the disease was in our possession: that in the uræmic poisoning resulting from the diseased condition of the kidneys, was to be found the true cause of the convulsive paroxysms of puerperal eclampsia.

Albuminuria is not, however, always present in cases of even the most violent puerperal convulsions, while, on the other hand, it frequently exists during pregnancy, or immediately after delivery, without being accompanied by the slightest indication of a tendency even to convulsive action. In fact, albuminuria has been found to be so common an attendant upon all severe diseases as to render any pathological theory of the nature and causation of disease built solely upon its presence or absence of little value. It is a well-established fact, nevertheless, that marked œdema of the face and extremities, or even general anasarca, and accompanied generally with albuminous urine, is very frequently present in those females who are the subjects of puerperal convulsions: showing a connection between the disordered condition of the urinary function and puerperal convulsions sufficiently intimate to justify us in ranking it among the occasional exciting causes of the latter, in the same manner we do the presence of the child in utero, irritating matters in the stomach and bowels, or an over-distended bladder.

A very little reflection will convince us that something more is required for the production of convulsions during gestation, parturition or the puerperal period than merely the physiological conditions which are then present. If the state of pregnancy, the throes of labor, or the condition of the female immediately after delivery be alone the efficient cause of convulsions, how, as we have already remarked, can we account for their being so rarely met with, compared with the very great frequency with which these supposed causes occur?

With Dr. Hodge, we believe that there is nothing special in the so-called puerperal convulsions—that no essential difference exists between them and such as are frequently observed in the non-pregnant state in hysterical women—that is to say, in those whose nervous system is in a state of exalted nervous irritation. In both cases the convulsions constitute, physiologically considered, virtually one and the same disease. The only real difference will be found, perhaps, to be in the degree of congestion present. This being comparatively slight in the unimpregnated state, very great during gestation, and even still more so during labor.

We are convinced that the pathology of puerperal convulsions, as taught by Professor Hodge, will be found, upon investigation, to be perfectly sound. Every one who has had much experience with the diseases peculiar to women, must have observed repeated attacks of convulsions to occur in non-puerperal females, of a highly nervous temperament, congenital or acquired, which, in all their essential symptoms, are precisely similar to those which occur during pregnancy or parturition, or the puerperal state.

In respect to the mechanism, if we may so express ourselves, of puerperal eclampsia — the reflex nervous irritations upon which they most usually depend—much may be learned from a careful perusal of the work of Tyler Smith on "Parturition and Obstetrics."

When we commenced the practice of our profession, the proper treatment of puerperal eclampsia was supposed to be definitively settled. The remedies—in respect to the propriety, necessity, and efficacy of which there has been and even still exists among leading medical authorities little if any dispute—are blood-letting, carried to its fullest extent, and repeated again and again, so long as the convulsions continue without a very decided abatement in their violence; cups and the application of cold water or ice to the head; drastic purgatives; sinapisms to the extremities; tartar emetic, in sedative doses, and as early a delivery of the child as possible; by the application of instruments; by turning; or even by embryotomy, when the natural process of labor is not sufficiently prompt, or any impediment to the escape of the child is present.

The very profuse blood-letting which was formerly, and by many physicians is still practiced, in cases of puerperal convulsions, is, we believe, unjustifiable—and we fear that it has added not a little to the mortality of the disease.

In very many, perhaps the majority of cases, a full bleeding, followed by the application of cups to the temples, behind the ears or upon the nucha is necessary, not so much as a directly curative measure, as a precautionary procedure, to guard, by unloading the vessels of the brain and spinal cord, against the effects of undue pressure at the nervous centers, and to diminish, at the same time, the danger of hemorrhage from rupture or effusion. Even at a later period of the attack, in the same way, a resort to general or local blood-letting may, perhaps, in some cases be found advantageous.

Although we do not believe that in any case puerperal convulsions will be found to depend directly upon cerebral congestion, yet it is not

to be doubted that they are often kept up and aggravated by it. It is well known that there is almost invariably present, during pregnancy, a condition of universal plethora, as a consequence of which engorgement of the vessels of the brain, to a greater or less extent, is liable to occur, particularly during the throes of labor, and, when convulsions have actually set in, by the laryngismus, which is an invariable attendant upon them.

In all cases of puerperal eclampsia it is important that the bowels should be early evacuated by an active purgative given by the mouth, or an appropriate enema. Unless we are certain that a copious discharge of urine has recently taken place, the introduction of the catheter should not be neglected. In more than one case we have known the convulsive paroxysms, if not excited in the first instance, to have been kept up by a distended bladder.

If the presence of irritating matters in the stomach is suspected, the propriety of an emetic should be carefully considered.

Cold douches to the scalp and nucha are a measure which should seldom if ever be omitted.

After a full bleeding, but more especially after the termination of labor, opium given in full doses is one of our most efficient remedies in nearly all cases of puerperal eclampsia. The evidence in its favor is at once copious and convincing. Our attention was first called to its employment in this disease by hearing Dr. W. D. Brinckle, in a course of lectures on Materia Medica, delivered before the Philadelphia Medical Lyceum, in 1819 or 1820, relate a series of cases of puerperal convulsions, in which he had given opium with the most decidedly good effect. Since then we have often employed it ourselves, with, we are persuaded, advantage, while a host of careful observers have presented us with their indorsement of the propriety and efficacy of its employment under the circumstances referred to.

In respect to the necessity of the prompt delivery of the child in cases of puerperal convulsions, we believe that the majority of obstetricians are in accord. It is very certain that under the same circumstances which require the prompt termination of the labor by manual or instrumental means, in cases unattended with convulsions, will the more imperiously be demanded a resort to these means during the presence of convulsions. But we are by no means convinced that there is the least propriety of our interference for the speedy delivery of the child, simply because of the presence of convulsions, particularly in cases where regular pains occur, and the head of the child is passing regularly through the pelvis.

If it was found that the convulsive paroxysms always or even very generally ceased upon the birth of the child, prompt delivery would then become a most desirable measure. But it is not so. We have invariably found the convulsions to continue, and with little or no abatement in their violence, after the uterus had been emptied of its contents.

Much, however, must be left to the judgment of the practitioner. It is unquestionable that cases of puerperal convulsions do occur, excited perhaps, but most certainly kept up and increased in violence, by an irritation having its rise in the uterus and intimately dependent upon the presence of the child within the organ, or by the action of the latter in its efforts to expel its contents. Under such circumstance the delivery of the child by artificial means is not merely proper, but it is a measure which should not be neglected. In the general run of cases, the necessity for delivery is by no means urgent. The source of irritation upon which the convulsions depend is not in the uterine nerves, but in those rather of the stomach, or bowels, or bladder. Removing whatever sources of irritation may be present, and guarding against the bad effects of cerebral congestion, the obstetrician has it in his power, in the great majority of cases of convulsions occurring during labor at least, to control, by the administration of ether as an anæsthetic, the paroxysms until such time as the birth of the child has been accomplished by the natural efforts of the uterus. After the completion of labor—presuming that all sources of irritation, in whatever organ existing, have been removed, it is, we are convinced, by the judicious employment of opium that we shall best succeed in arresting, effectually, the disease.

In conclusion, we would remark that our own success in the treatment of puerperal eclampsia has not been much to boast of. We find, upon a careful examination of our record of the cases that have fallen under our notice, one in 4·8, or nearly 21 per cent., have terminated fatally. This percentage of mortality, however, is that given by all the cases we have placed upon record since we commenced our career as an obstetrician. Taking, however, only the cases which have occurred in our practice during the last fifteen years, the percentage of deaths has been somewhat more favorable—it being not quite eighteen, or one in 5·54 cases.

Dr. Darrach remarked that his reliance was in venesection, anodynes, and anæsthetics.

In the case of Mrs. McD., there occurred three convulsions during the primary stage of a first labor. They successively augmented in severity, recurring at shorter intervals, and were more protracted; and the pulse, with each recurring fit, became more frequent and contracted. A fatal venous congestion of the cerebro-spinal system being apprehended, Dr. Dewees's plan of opening the veins in both arms was adopted. Two large streams of blood flowed simultaneously, and effected, without an injurious loss of the vital fluid, a salutary revulsion from the nervous centers and important organs. The pulse became reduced in frequency, and enlarged; the circulation was equalized, and consciousness restored; the pains became regular and efficient, and in due time the birth took place.

As the convulsions in this case occurred during the first stage of labor, anodynes were inapplicable, and anæsthetics were unnecessary.

In respect to anæsthetics, his use of them, thirteen years ago, in the convulsions of a child, suggested their trial in puerperal convulsions.

In the winter of 1849, he attended a child, three years of age, under cephalic influence. On the fifth day convulsions set in, which were recurrent without return of consciousness, becoming more protracted and violent; and finally, without appreciable intermission. They baffled ordinary treatment; death seemed inevitable. Without known precedence at the time, he administered chloroform. Instantly almost, the diastaltic system was quieted and consciousness restored. Nevertheless, after a subsequent sickness, without convulsions, the child died.

The principle being thus established, that anæsthetics control convulsions, the suggestion naturally followed to use them in every form of convulsions, and especially in those of the puerperal state.

In one such, occurring in the practice of my friend Dr. Fricke, it was soon after tested. No other means were used. The trial was perfectly successful.

In these cases of puerperal convulsions there were neither irritating ingesta, renal disorder, nor systemic disturbances. Where else than the uterus is the seat of puerperal convulsions?

Cause and effects are here separated, it is true, at great distance from each other; but so it is with hip disease and vesical calculus. In the latter, the glans penis is painfully affected, and in the former, almost all the symptoms are in the knee. And further, the instances are not few in which the lesion is in one organism and the category of symptoms are in another. Insanity and thoracic pains are often the pathognomonics of a diseased liver; so also pains in the anus, of heart disease; persistent pain in the sole of the foot, in some cases of urethral stricture; dementia, from erotism; chorea, from uterine debility; and convulsions, from dentition and intestinal worms. May it not then be said that the disturbance of the diastaltic system and cerebrum in puerperal convulsion is owing to an abnormal condition of the uterus? And more especially so, because in women the empireship of the body is the reproductive organism. In all languages, her name, female, femele, feminine, femina, which have their root in feo-fœtus, signifies producer. The female body is made for the uterus. No wonder, then, that with uterine development woman's body and mind takes its special shape, beauty, and propensities; that the uterus is the center of sympathies; and that under lesion or distracted function it should convulse both animal and organic life. While, then, in exceptional cases the accidental causes of puerperal convulsions are in the abnormal condition of other organs, yet a disturbed uterus is the punctum saliens of convulsion during gestation, labor, and confinement.

This doctrine indicates in the therapeutics, the relief by revulsive blood-letting of the great nervous centers and important organs from venous congestion, the relaxing and quieting the uterus by anæsthetics, and the entire repose of the body by anodyne enemata.

In regard to the renal cause of puerperal convulsion, he remarked that the presence of albumen in the urine, and of œdema, were not satisfactory evidences of it, because — 1st. These symptoms, unassociated with tubes in the urine, is no evidence of Bright's disease of the kidneys. 2d. Tubes, albumen, and œdema are not limited to Bright's disease, but are common also to sequelæ of all the exanthems. 3d. The effect of retention and accumulation of urea in the blood produces coma and not convulsions; and so, if there be a change of urea with carb. ammonia.

Dr. Remington believed that v. s. would not cure convulsions puerperal. Over-depletion is the rock on which the profession has split. The treatment at present is more judicious and successful, and we have less depletion. He had seen but six cases. In his experience, moderate depletion was of service. Emptying the womb was important, although not always effectual in arresting the convulsions. In one case in particular, after v.s. and evacuation of the bowels, assafetida and tinc. opii had a happy effect, in the form of enema. He regarded the internal use of ether, by inhalation, as of great value; he was fearful of chloroform, and never employed it. Ether, he believed, would act as a preventive in these cases, and should be employed with that view, on the first approach of convulsive movement, nervous twitching, and disturbed vision. The female is subjected to high nervous excitement, local congestions, and the brain is overloaded with blood; hence the frequent recurrence of convulsions at the time of a pain. He was doubtful as to the influence of œdema as a predisposing cause, though it is often a coincidence. He had treated a lady, who was extremely œdematous, with a sallow skin, her general health broken down, dyspeptic, and nervous. She was delivered of twins at full term of utero-gestation, and got well without accident, though the œdema was greater than in any case he had ever attended. He should not regard the presence of *albuminuria* as pathognomonic of puerperal convulsions, as he believed, if the urine were tested, it would be generally found to accompany a state of pregnancy.

Dr. W. L. Atlee did not care for theory, but desired information on the practical point, the treatment. Early in practice he adopted v.s., without regard to quantity, as he was taught during his college term. A short time after graduation he had a case of convulsions, in a pregnant woman, though not in labor. She was at eight months, and was more or less œdematous, and very fleshy. When he arrived, they were holding her up, and she had no spasms; was very much oppressed in breathing, panting like an animal that had been running. She was ejecting gas from her stomach, and her face was suffused, bloated, and dark almost to asphyxia.

It was evening, and she had eaten a hearty dinner of sour-crout. He gave her an emetic, and she speedily threw off a large quantity, producing great and immediate relief. Still the convulsions were repeated. The os uteri was found to be dilating and dilatable, and he delivered her with the forceps, with the hope that this would relieve her, as he had been taught. The placenta was removed, yet the convulsions returned, again and again, and she died in spite of everything, v.s. included. In this case the patient was not purged. There had elapsed several hours since the ingestion of the food, and the brain and spinal marrow were materially injured before the stomach was relieved.

Another case occurred in a primipara. There was no œdema or fullness of system. The os was dilating, and all going well. Two hours after he was hurriedly summoned, and found her in convulsions. He opened both arms, allowed the blood to run freely, delivered her with the forceps as soon as possible, and, though she was blanched, the convulsions continued. The amount taken was fifty-four ounces. Various remedies were administered, without effect, and she was expected to die. He asked if she had eaten anything, and received a negative reply. However, he gave her a drachm of ipecacuanha, opened her jaws, and poured it down. She was then unconscious. In half an hour it acted freely, she vomited large chunks of meat; immediately opened her eyes, became rational, and had no more convulsions, and recovered excellently. She then acknowledged having eaten freely of cold meat during the absence of her attendants. This made a strong impression on his mind.

Another case was seen soon after he came to Philadelphia, also a primipara. In his experience, convulsions had occurred only in first labors. He was not, however, certain that the first instance referred to was a first child. This was an unmarried lady, who came to Philadelphia to be confined, and hide her disgrace. It was important to know the name of the father of the child, which she obstinately refused to disclose. In the midst of labor, Dr. A. asked the question, and immediately she went into a convulsion. This was from emotion alone. There was no œdema. He opened a vein in order to protect the brain and spinal marrow from the influence of the convulsion. He delivered with the forceps as soon as possible, but the convulsions continued. He had never seen the emptying of the womb check the convulsions. The usual means were employed, but without benefit. Having received a telegram requiring his absence from the city, he left her in charge of Dr. Grant. He returned next day, and found her the same, though Dr G., a skillful physician, had employed every means to arrest the excitement. Chloroform used freely had no good result, as the effect was but temporary. Believing the mucous surfaces of the stomach and bowels had a great influence in keeping up the convulsions, he gave her a drastic cathartic. She had thirty paroxysms. He gave her ol. tiglii, five drops, to be repeated in an hour. In three hours, the bowels were emptied, the convulsions ceased, and recovery soon followed.

He saw another case after delivery, in consultation. She appeared in *articulo-mortis*. The attack had continued two days and one night. Everything had been done, except to act briskly on the bowels. Croton oil was given in large and active doses. She was unconscious at the time, but when the catharsis ensued, she became conscious, the spasms ceased, and she recovered speedily.

In another case, though delivery was effected, the attack did not yield. She was bled, and the cathartic was about being given, when Dr. J. K. Mitchell arrived in consultation, who suggested another bleeding, without success. The oil was next given, it acted freely, and the convulsions ceased. In this case, fourteen drops of croton oil were given in divided doses.

In another instance, there was excessive anasarca, great puffiness of face and body, albuminuria, intense pain, and fullness of head. Copious bleeding was tried. The womb was emptied, and she was bled again. Catharsis was useless, and death ensued nine days after delivery. He believed the majority of cases recovered. He had had no experience with opium in this affection.

Dr. A. believed that the principal causes of puerperal convulsions were reflex, and that the disease may be maintained either by uterine, ovarian, vesical, gastric, intestinal, renal or other irritations; and for the proper treatment, it was necessary to keep this fact in view. He would still bleed merely to relieve the vascular congestion of the spine and brain, and to favor the action of other remedies. He would also, for the purpose of relieving spinal congestion, cup along the back, which would accomplish this object as well as general v.s., without debilitating the patient. He would also call attention to the value of position. The patient should not be allowed to lie on the back; this favoring spinal engorgement, while the tongue, in the state of unconsciousness, falls back on the glottis, producing asphyxia, and thus aggravating all the symptoms. Turn the patient on the side, rather inclining forward—the tongue will, by its gravity, aid in opening the larynx, and respiration will be more free, while the congestion of the spinal marrow will diminish from the same cause, particularly after the blood-vessels have been emptied by v.s.

Dr. Mayburry had seen these attacks in the ninth and second deliveries. He had been particularly unfortunate. He would ask the experience of a gentleman present who had been very successful with ether, Dr. E. Wilson.

Dr. Wilson had seen this affection in first and subsequent pregnancies, four times in one case. He had employed ether with good results. He had given it thirty-six hours consecutively, with a favorable recovery. Since 1854, he had seen 25 cases, of which 22 had recovered. He had never seen it without observing premonitory

symptoms that might put the physician on his guard. All these cases had albuminuria, and more or less œdema; all were of costive habit. In one case, at the seventh month, without a sign of labor, convulsions came on, followed by paralysis of the right side, lasting for twelve hours after bleeding. Ether was given, and the convulsions ceased. Four days after, labor set in, and she was delivered of a still-born child. He did not believe the presence of the child in the womb had any marked influence in continuing the convulsions, and he would disregard the indication for hurried delivery. In one case, years ago, he opened the head, and delivered in that way; but the convulsions continued, and the case proved fatal. In one case, the ether relieved after sixty-five convulsions. He kept the patient under the anæsthetic for six, eight, ten, or twelve hours. He believes the long-continued inhalation of ether corrects the poisonous element of the blood which produces the convulsions, and always controls it, unless there should be some lesion of the brain or central organs.

Adjourned.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

PATHOLOGY AND TREATMENT OF PHTHISIS PULMONALIS.

Phthisis pulmonalis has been the subject of many an essay, and books, great and small, valuable and valueless, have been written, published, and read upon the same — remedies one after another have been brought forward as almost specifics for the insidious and slowly-wasting disease, and yet the fell destroyer continues to decimate the race. *Tuberculosis*, as ever, continues to produce paleness, emaciation, and death.

In the *Cincinnati Med. and Surg. News* for June, Dr. F. A. Anderson, of Elizabethtown, Kentucky, has an article upon the above subject. His *pathology* differs somewhat from other writers. Though we have not space to elaborate it, we shall make a quotation. He says:—

"Faulty innervation of the pneumogastric nerve is the primary cause of pulmonary consumption. Can we prove this to be so? Yes, we can, beyond the shadow of a doubt, if the cause of any other disease can be discovered by the process of rational induction. This nerve supplies the stomach, lungs, larynx, and œsophagus with their principal nerve power, and they are the first to show signs of an abnormal condition in the incipient stage of the disease, the symptoms of which occur a long time previous to the localization of tubercles—even previous to the occurence of hæmoptysis, and are manifested by impaired digestion, quickened respiration, weakness of voice, and occasional difficulty of deglutition. Simultaneously, or probably previously, there is an abnormal quantity of phosphoric acid set free in the economy. Now we cannot say for certain that this acid is the product of diseased nerve structure; but one thing is certain, it detracts from the nerve power of the entire organism. We cannot say either whether it is the cause or result of nervous disorder, but in all diseases of the nervous system it is discharged in unusual quantity."

While upon the subject of pathology of tubercle, it may be well to allude to the opinions of another recent writer. Dr. C. R. Curtis, of Clarksville, Missouri, has an article upon this subject in the *St. Louis Med. and Surg. Journal* for September, and also in previous numbers. Dr. Curtis takes the ground that the first link in the chain of morbid action, which results in the formation of tubercle, consists in a *disturbance of the just equilibrium between the vital and chemical forces, acting in the ultimate cell structure of organs.* The minutiæ of his views, and the arguments by which he supports those views, we have not now space for. Prof. L. M. Lawson, as well as others before him, as many of our readers may know, in his recent work upon phthisis pulmonalis, holds to a still different view. He believes tubercle to be the product of the metamorphosis of the tissues, and is consequent upon an excess of metamorphosis or disintegration, over elimination or excretion.

Returning to Dr. Anderson's paper, we will briefly consider his suggestions in regard to treatment. He advises an avoidance of severe mental exercise, and moderate manual labor in the open air. Of remedies, he says:—

"We should administer that tonic which will produce the most durable and equable state of tonicity, one that will produce a moderate and continued exhilaration of the spirits, as well as adding to the physical strength. The best tonic for this purpose is *arsenic*, given in the form of Fowler's solution. It should be given but once a day, directly after breakfast. Two drops is the dose to begin with, increasing one drop every day until we administer as high as ten drops. The patient should continue this dose for as much as two weeks and then begin to diminish, taking one drop less every three or four days until he gets back to the original dose; then, after continuing to take two drops a few days longer,

there should be an interruption of about a week, after which it should be repeated in the same way."

We do not see the necessity of commencing with such small doses in the adult. Our dose is from six to ten drops taken three times a day, two or three weeks out of four. In this connection, we propose to relate a case that we regard as one of much interest, and which occured to us before the article by Dr. Anderson came to our notice. About six months ago, we were called to see a child, aged one year. The parents thought the head of the child was unnaturally large, and growing out of shape. The child was a male, and was fat even to obesity and deformity; we did not think it advisable to prescribe, and tried to quiet the fears of the parents. Two months later we were called to prescribe for the child for diarrhœa and unusual restlessness, and persistent crying without apparent cause. The appetite was now very poor, and emaciation had commenced and was progressing with considerable rapidity. The case was carefully examined, and we thought we saw evidences of meningeal tuberculosis. The bowels were unnaturally large, and mesenteric tuberculosis was very apparent. Treatment was now instituted, the minutiæ of which we have not now the time to detail. Two months later the child was much emaciated—the color of the skin was that of white wax; the lips were without color; the ears were nearly transparent; there was still no appetite; the diarrhœa, in spite of remedies, was still continuous; movements from six to twelve times a day.

About this time, my friend, Prof. S. R. Percy, of New York, while visiting at my house, saw the case. He considered it a well-marked case of *tabes mesenterica*, with probable meningeal tubercular depositions. He gave an unfavorable prognosis. From this time emaciation was very rapid. Soon the lungs became involved. A persistent and harassing cough severely taxed the strength of the now greatly-enfeebled patient. Quick and labored breathing became a prominent symptom, and death seemed imminent. Emaciation had progressed to that point that the patient seemed all head and bowels. The limbs had been unusually plump—now the skin hung in folds about the almost muscleless bones. The eyes were frightfully large, and painfully glossy. The diarrhœa was still as troublesome as ever. The appetite was utterly wanting. The pulse was so quick as to be almost uncountable; the breathing was very quick, and so labored as to be heard some rods away. We had encouraged no hope, and looked for death every day.

For the constitutional symptoms, iodide of potash, iodide of iron, syrup of the phosphates, quinine, wine, brandy, etc., had been used with all faithfulness. For the diarrhœa, opiates and the most powerful vegetable and mineral astringents had been used, and even creosote, which has seldom failed us, did no good in this case.

When we expected death every hour, and with no hope of permanent relief, we made the following prescription: Fluid extract of belladonna, Fowler's solution, of each one drop; iodide of potash, half a grain; water one drachm; mix for a dose, to be repeated every three or four hours. The symptoms began to improve at once. Since, when I have inquired after the child, the friends have said: "Since you commenced the arsenic, there has been no bad symptoms." Now, after two months, the appetite is good, the bowels are regular, the child is rapidly gaining flesh, and seems in good condition for ultimate recovery. We confess we have never before seen such marked improvement under treatment. The patient is cheerful and playful, the breathing is natural, the pulse is good, the cough gone, the head symptoms absent, the bowels diminished in size, and that peculiar knobbed feel very greatly lessened.

We have used arsenic, in connection with iodide of potash and belladonna, several times before, with very marked effect, and really most unexpected and happy results, in several cases of severe chronic cough, connected, as we supposed, with a scrofulous or tubercular cachexia.

We have faith to believe that arsenic will yet be found to fulfill many indications hitherto unrecognized, and, in this connection, we would refer to our *Summary* for last week.

Since writing the above, we notice, from an abstract in the *Boston Med. and Surgical Journal* for December fifth, copied from a recent number of the *British American Journal*, that M. Bouchut regards arsenite of soda as one of the most efficient agents with which to combat scrofulous and tubercular cachexiæ:—

"Arsenic," says M. Bouchut, "is one of the best of our tonics, and it is a powerful succedaneum of iron, quinine, or cod-liver oil, and for this reason it is efficacious in most organic and nervous cachexiæ when the resulting disorders have not become too considerable or too inveterate. In scrofulous cachexia it is an excellent

remedy, children under its influence generally recovering their strength, color, and appetite."

It is but just to observe that M. Bouchut does not regard such improvement as likely to be permanent. It may be regarded as a little singular that several have independently, and almost simultaneously, observed this beneficial influence of arsenic over tuberculosis and similar affections.

DIPHTHERIA.

In the *American Medical Times* for October nineteenth, Dr. Ezra M. Hunt, of New Jersey, has an article upon the subject of diphtheria. Last week we referred to the opinions of Dr. Plimpton —in his article, of which we gave a summary, he spoke highly of chlorate of potash as a prophylactic. Dr. Hunt holds to the same opinion. He says:—

"The very fact of taking something as a preventive has a valuable control over mental excitement, and the chlorate of potash being itself a tonic, is no less a safe than an efficient remedy."

Dr. Hunt speaks highly of early treatment, and says: "Every case seen in two days after attack recovered; those not seen until four days or after, all died." We believe much depends upon early and judicious treatment; but that any treatment, however early instituted, will save all cases, is quite too much to expect. Dr. Hunt's article contains nothing novel in regard to treatment. He would use quinine liberally, and says:—

"I have never seen the disease which, as a rule, will so well bear the use of quinine, citrate of iron and quinine, wine-whey, and the best of food."

At a meeting of the Medical Society of the County of Kings, as per published Transactions in the *American Medical Monthly* for September, the subject of diphtheria was under discussion. Dr. Bell inquired if any of the members present had observed the *recurrence* of the disease in the same patient. "None present knew of any case of second attack." It has been our fortune to see two such cases. About eighteen months ago, we attended a lady, aged about forty-five years, suffering from diphtheria —we discharged this same patient about a week ago, after recovering from her second attack. In the same neighborhood our second case occurred. A young lady, aged about eighteen years, had the disease about the same time that the case just referred to had her first attack. In August last the disease prevailed in the locality of her home, and two cases, one very severe and fatal, in the same house. At this time the young lady had a second attack, though not severe. Before completely recovered, she went some fifteen miles away to attend school. About two months later she was brought home sick, with quite a severe form of diphtheria—making her third attack, which was the severest.

Dr. Enos said he had seen cases of apparent paralysis of the muscles of deglutition, causing regurgitation of fluids through the nostrils on attempting to swallow. We have seen such cases, as we have on a former occasion stated; but we have looked in vain, in all the papers upon diphtheria that we could get possession of, for an expressed recognition of this symptom by others.* We have certainly seen cases that could not swallow, when there was not sufficient swelling or accumulation of deposits to account for the symptom.

Dr. Ball's treatment is thus given:—

"His treatment is not to stimulate in early stages of disease, but to give calomel in small and repeated doses, combined with antimonial powder and nitrate of potash as an antiplastic. As soon as the formation of membrane is arrested he then gives Dover's powder as a sedative, quinia, and stimulants. Stimulants he thinks *very* unsafe in the early stages of the disease; has had about sixty cases within two years; treats it on same principle as membranous croup."

Ordinarily our patients have borne stimulants remarkably well. When a patient has had a relish for egg-nog, and would take it freely, we have had no fears, and have never lost such a case. Unfortunately, often, when we most desire its aid, the patient will not take it, or else cannot swallow.

The partial palsies, that so often accompany or follow diphtheria, give evidence of the profoundly disturbing perturbations to which the nervous system is subject in this disease, and perhaps will reasonably affect our treatment. It is probable that quinine and strychnine may be found to have a powerful and favorable influence

---

* Since writing the above, we find that M. Trousseau has referred to the subject. Entering rather fully into the subject of diphtheritic paralysis, he simply alludes to difficulty of swallowing as possibly having this connection. He alludes, also, to a symptom we have not observed—an enfeeblement of the virile faculties, extending sometimes to the most complete anaphrodisia. Had we inquired for the symptom, possibly it might have been present.

over this cerebro-spinal disturbance, while arsenic and the chlorates may affect favorably the septic tendencies of the disease.

OXIDE OF ZINC AS A REMEDIAL AGENT.

In the *American Medical Monthly* for November, Dr. S. Waterman has an article upon the therapeutical employment of oxide of zinc. After remarking that this remedy "exerts a powerful sedative or soothing influence over the brain and the ganglionic nerves," he makes the following therapeutical suggestions:—

"1. In *Delirium Tremens*.—Indeed, when all other remedies seemed to fail, when opium and its kindred narcotics had been unable to make any impression, and a fatal issue seemed unavoidable, oxide of zinc has in several instances rendered me signal service, and fully to justify the confidence I feel in its therapeutical power. It need not be given in large doses even here; two to three grains every two hours are sufficient. It may be combined, if necessary, with opium or other remedial agents; and its use should be continued for some time even after the delirium has been overcome.

"2. In *Eclampsia Infantilis*, after the fits have been broken by the free use of chloroform, zinc will be found a very serviceable agent to control the cerebral and nervous agitation, which almost always still harass the little patient for a short time. I have often combined oxide of zinc, in grain doses, with calomel, digitalis, and pulv. scillæ. Its effects have been the most gratifying, and the impartial practitioner can certainly readily verify the truth of the observation. As in the former disease, its use ought to be continued after the convulsions themselves have disappeared.

"3. In the *eclampsia* happening during pregnancy or labor, or menstrual irregularities, oxide of zinc acts beneficially upon the sensorium, with or without the administration, at the same time, of opium and calomel; especially in those cases where the convulsions originate from a high state of nervous sensibility, as is the case in subjects to hysteria, in its various forms. After the employment of chloroform, zinc will be found to exert its sedative influence in a most positive manner. I have given two or three grains per dose every two hours, and would not advise a larger dose. In convulsions produced by plethoric habits, its effects are less reliable; while in convulsions arising from uræmic toxicatio, its effects have not been sufficiently tried to warrant any positive statement in its favor.

"4. It will be found a most reliable agent in the various forms of *hysteric convulsions*, depending, as they do in most cases, upon inordinate action of the nerves and their centers. It is in these cases that its influence over the plexus of the stomach is most strikingly verified.

"5. In the *exanthematic diseases*, when the eruption is accompanied by cerebral irritation, and even by convulsions, oxide of zinc has long been known to exert a soothing effect upon the nervous centers, and has been used by the most experienced European practitioners.

"6. I have treated a few cases of *epilepsy* and a few cases of *chorea* with zinc. I have not had sufficient opportunity to watch its influence, but believe it to be, as stated by various practitioners from time to time, for more than half a century, a very efficacious remedy in some cases; more especially it is true of chorea than of epilepsy.

"7. European writers recommend it as an excellent remedy in asthmatic difficulties and hooping-cough; but I have no experience to offer on this head, nor on the three following.

"8. In England and in this country it has been very highly extolled against the night-sweats of phthisis, and as useful in all cases of profuse perspiration.

"9. It has also been well recommended against worms, and still more against chronic dysentery.

"10. To complete the list, I must yet mention that it is reported to have cured some of the most obstinate cases of intermittent fever."

Dr. Waterman says the estimates he places upon this remedy are based wholly upon the results of his own experience and observation.

NEW RHINOPLASTIC OPERATION.

In the *San Francisco Medical Press* for July, Professor E. S. Cooper describes a new rhinoplastic operation. He says:—

"We have had several cases recently, in which we practiced, with entire success, the method of introducing thin arched plates of virgin silver into the soft tissures, to hold them up when the bones of the nose had been lost. Thus far, they bid fair to succeed admirably, as there is every prospect that these plates will become encysted, in most cases, though time enough has not been given to test the method in this respect. There is one advantage this plan has over that of transplantation, viz., that it entails no additional deformity, even should it fail entirely in relieving the one for which it is tried, and we believe that, in all cases, it may be rendered beneficial, where bone structure alone has been lost. We have a case under treatment now, in which a considerable part of the ossa nasi, the vomer, and a fragment of the superior maxilla were lost—so much so, that the major part of the tissues representing the nose rested entirely below the surrounding surface. A more disagreeable deformity of that organ could not possibly occur."

In this case the integuments were raised and dissected each way for nearly two inches, and "two arched plates of silver, shaped like the ossa nasi, were introduced and the integuments brought over them, so that the nose at once assumed the natural shape of one pretty well formed, which it retains still, six weeks after the operation."

GUNSHOT WOUNDS PRODUCED DURING THE LOADING OF ARTILLERY.

Dr. Cortese relates five cases, and gives the following summary of his observations: "No other blow of a projectile imparts so great an amount of commotion to the entire limb, and the surgeon is, therefore, compelled to direct his attention to the whole extremity, whatever amount of lesion may be manifest in the hand. A neglect in this regard may lead to gangrene gaining possession of a large portion of the limb, or to a generalized suppuration, while a diminished power of reaction in the injured parts may give rise to purulent infection, or render amputation useless. When the hand is severely torn, its disarticulation, and even the amputation of the forearm, is insufficient to secure recovery, because the tissues are more or less destroyed in their intimate structure in consequence of concussion. In such cases, the arm should be amputated. The sooner amputation is performed, the greater is the probability of a favorable result. The rapid and very extensive tumefaction of the limb constitutes a sufficiently certain criterion of the severity of the derangements which are propagated along its whole extent. When no fractures are detected in the diaphysis of the bone, some lesion in the ulnar articulation must be suspected. When the lesion does not seem severe enough to call at once for amputation, we must be prepared for secondary occurrences, which will unfit the limb for its functions. Still, conservative treatment should, in such cases, be attempted."—*Brit. and For. Med.-Chir. Review.*

EXTENSIVE INVAGINATION.

The *Medical Times and Gazette* reports the case of a child, three and a half years of age, in which the cæcum, ascending and transverse colon had become invaginated into the descending colon, sigmoid flexure and rectum, and projected two and a half inches through the anus. The part protruding through the anus was found, at the autopsy, to be the inverted cæcum and appendix vermiformis.

The Experiment with the Camel.—The *Scientific American* states that the use of camels in California for carrying freight is considered in some respects successful. They are employed in carrying salt over a distance of one hundred and forty miles. They are said to be docile and tractable, and very easily fed, eating all kinds of grasses, thistles, and willows. Their carrying power as well as their speed are said to have been overrated, being not greater than that of mules, or, at times, that of oxen. The greatest difficulty exists in the softness of their feet; on rocky ground the foot becomes tender and swells up, and the skin cracks, making the animal lame.

REVIEWS AND BOOK NOTICES.

Notes on the Surgery of the War in the Crimea. With Remarks on the Treatment of Gunshot Wounds. By George H. B. Macleod, M.D., F.R.C.S., formerly Surgeon to the Civil Hospital at Smyrna, and to the General Hospital in Camp before Sebastopol; Lecturer on Military Surgery in Anderson's University, Glasgow, etc. Philadelphia: J. B. Lippincott & Co. London: John Churchill, 1862. pp. 403. Price $1 50.

This is the only full British medico-military account of the war in the Crimea, or, as we in this country call it, the Russian war. It is written by one who had extensive opportunities of observation in the medical department of that terrible campaign. As it illustrates the surgery of modern warfare, showing the effects of missiles which have been most recently introduced, and which were unknown when the text-books on military surgery were written, the work has special interest for us at this eventful time.

Our countrymen will see with surprise how unprepared was the great and warlike British nation for commencing such a contest, how slow in movement, irregular, and badly provided was the beginning of the campaign, and how inhumanly the government allowed its brave soldiers to die from privations and avoidable disease. The contrast with the rapidity of organization of our own immense army, with its unequaled arrangements for the comforts of its soldiers, and the efficiency of the medical department, will impress every American reader. The food furnished the British soldiers during the first winter in the Crimea was deficient in quantity and quality, and with but little variation from the monotonous ration of salt pork and biscuit. Coffee was allowed, but it was served out raw, and was almost useless. The absence of fuel, or the difficulty of getting it, induced the men to eat their salt pork almost raw, or merely toasted at their meager fires. During the first winter the soldiers wore the same clothing in which they sailed from England, and by the time the weather became intensely cold this was worn to tatters. "The one only blanket which each soldier possessed afforded, even when dry, but a feeble protection against the cold of the tents, but as he generally carried the same blanket with him into the trenches, it was commonly dirty and soaked with water when he came to sleep in it at night. The soldier's boots were seldom removed when he lay down to sleep, so firmly adherent were they to the swollen feet."

It is not to be wondered at that, under such unfavorable circumstances, more than one-half of the army were, at one period, on the sick list. In January, of the first winter, the number of sick was 12,025, while the number fit for duty was 11,367.

The following paragraph, from Dr. Macleod's book, will give an idea of the wretchedness endured during that terrible season:—

"Day after day passed in severe bodily exertion

and anxious watching — one moment digging laboriously in extending the approaches, and the next with arms in hand repelling the assaulting enemy; almost always wet; exposed without cover to the drenching rain and soaking snow, the keen frost and biting wind; standing for days in wet mud; constantly either unnaturally excited or depressed; ever in danger and without hope of a change; their dirty humid clothes in rags, their bodies covered with loathsome vermin, which seemed to grow out of their very flesh; no comforts in their wind-pierced tents on the bleak plateau; no fires, unless, weary and foot-sore as they were, they dug beneath the snow-covered sod for wet roots, wherewith to kindle a feeble and tantalizing blaze; without food till, after hours of persevering exertion, they managed to half cook their unpalatable ration over their winking fire; huddled into a crowded tent to pass the night in a close, noisome atmosphere, on the oozy ground, covered by the same blanket which protected them in the wet muddy trenches; longing for the morning, though its early dawn was signaled by the bugle sound which called them to a renewal of that dread task whose severity made them yet again sigh, 'I would to God it were night!' This sketch is no exaggeration. It is true, though difficult to be realized, even now, by those who themselves saw it. Can we, then, find anywhere else in reality—nay, can we, by the utmost stretch of imagination, conceive a more fruitful field for the seeds of disease, or the harvest of death, than is here presented to us in the camp of the weary, anxious-minded soldiers who fought so gallantly, endured so constantly, or died so nobly, and who now consecrate by their humble graves the green hillsides and lonely valleys of the Crimea?"

And be it known that, while all this suffering was being endured, abundant clothing, and many necessaries, by which hundreds of lives might have been saved, were lying on board vessels, or in storehouses, within reach of the soldiers, but, unfortunately, fast "bound up with red tape," and with no authority for their distribution.

We recommend the perusal of the work particularly to all army surgeons, yet it will, we think, be a highly interesting history to all classes of medical and general readers. Perhaps not much has been gained to military surgery strictly, by the experience of the Crimea. The war was but a short one, and the medical departments of the allies seem to have been managed with so little system as to have furnished few scientific data; but a terrible lesson on the neglect of sanitary measures in an army has been impressed.

The publishers have done a great favor to the profession by rendering this interesting work accessible to all at a trifling cost.

Jenkins's Vest-Pocket Lexicon. An English Dictionary of all except Familiar Words; including the principal scientific and technical terms, and foreign moneys, weights, and measures. Omitting what everybody knows, and containing what everybody wants to know, and cannot find. By Jabez Jenkins. Philadelphia: J. B. Lippincott & Co., 1861.

The title-page of this little book expresses what the work claims to be. The general utility of a dictionary is certainly to define that which is least likely to be known, and it has been the object of the author to present all words in the language which are liable to be sought for by readers; thus disencumbering the book by omitting those which are familiar to all, and so reducing the size of the volume as to be convenient as a pocket manual. All other abbreviated dictionaries, which we have seen, have, in order to economize space, excluded the rare and technical words—those, indeed, which are least known, and most sought.

Notwithstanding the miniature appearance of the book, it will, we believe, be found, for most practical uses, a full dictionary of the language. We have thoroughly tested it on what schoolboys would call "hard words," and found it not wanting.

Every means that will render information more conveniently accessible to the masses is of great importance, and this little lexicon, which may always be at hand, is, in that view, invaluable. We commend it to medical and other students, as it is composed, for the most part, of technical and scientific terms.

The mechanical execution of the book is exquisite neatness.

Eulogy on the late John W. Francis, M.D., LL.D. Being a Discourse on his Life and Character. By Valentine Mott, M.D., LL.D., Emeritus Professor of Surgery in the University of New York, etc. etc. Delivered before the Academy of Medicine, New York. S. S. & W. Wood, 1861.

The interest in this beautiful memoir of the loved and venerated Francis is added to by the great respect every one in the profession feels for its famed author. The names of Francis and Mott have, for a long time, stood the greatest among the savans of New York. The former is now, after a long life of usefulness, numbered with the great departed; while the latter, with a brow blanched by the snows of life's winter, and crowned with honors, bids, in this eulogium, a farewell to his lost friend, colaborer, and companion. We have always mentally associated these two eminent men, and, while one has gone where in immortality his youth shall be renewed, we rejoice that the other lives to enjoy in health his well-earned honors. The sympathy between them, and the contemporary labors of these two worthies, is thus briefly alluded to by the eulogist:—

"The lines of Dr. Francis and myself, as is well known, have been parallel, and over the same ground for more than the period usually allotted to man, and our mutual friendship has been lifelong and close; as tender, I believe, during the

last years, as when, more than a quarter of a century ago. he called his son by the name of his friend. Together, O companion of my youth! we saw this city pass from its former simplicity to its present grandeur—together we saw the white-winged sailing vessels in the bay superseded by steamers that walked upon the waters, pillars of cloud by day, and of fire by night—together we saw these steamers succeeded by locomotives, compared to the speed of whose flight 'the tempest itself lagged behind;' and together we saw those iron chargers succeeded by a telegraph, whose ethereal messengers outstrip the very arrows of light. Together we had journeyed up the hill of life—together we had enjoyed the prospect from the summit, and together we had commenced to descend—

'But where the path we walked began
To slant to its autumnal slope,
As we descended, following Hope,
There sat the shadow feared of man;

'Who broke our fair companionship,
And spread his mantle dark and cold,
And wrapped the formless in its fold,
And dulled the murmur on thy lip;

'And bore thee where I could not see,
Nor follow, though I walk in haste,
And think that somewhere in the waste,
That shadow sits, and waits for me.'"

We have read with a sad enjoyment, and, we hope, with profit, this discourse on the character and labors of one who, in life, was our ideal of a true physician; and we would advise all, who would preserve a memorial of one of our country's greatest and best men, to secure a copy of the eulogy.

The Pathology and Treatment of Venereal Diseases: including the Results of Recent Investigations upon the Subject. By Freeman J. Bumstead, M.D., etc. etc. With Illustrations on Wood. 8vo., pp. 686. Philadelphia: Blanchard and Lea, 1861. (Second Notice.)

This work will, in our opinion, be generally recognized as one of the most important and valuable that has ever issued from the American press; in fact, we know of no book on the same subject which is superior to it. Dr. Bumstead has brought to bear in its preparation a wide range of reading, and extensive clinical experience, and a spirit of philosophic inquiry. His style is clear and forcible, and wholly free from the flippancy to which so strong a temptation seems to exist in the discussion of venereal diseases. We sincerely regret that circumstances compel us to bring the present notice within the shortest possible limits, for we should have been glad to follow our author in his reasoning upon the questions which have so much perplexed the syphilographers of late years. As it is, however, we must be content with giving our readers an idea of the positions maintained by him, leaving them to examine his arguments for themselves.

Dr. Bumstead believes that there are three forms of venereal poison: that of gonorrhœa, that of chancroid, and that of chancre, or the true syphilitic sore. In other words, he adopts the views adhered to by the French school, the chief exponents of which, hitherto, have been Ricord and his pupil Fournier. As our readers are probably aware, these gentlemen assert that the simple or soft chancre, more appropriately called the "chancroid," is destitute of constitutional sequelæ; and that the true, hard, or infecting chancre, itself the result of a taint in the system, is infallibly succeeded by those phenomena. Each of these forms of sore has its origin in inoculation, and matter from each, applied to the broken skin, induces a sore like that from which it was taken. They may coexist in the same person, neither preventing the occurrence of the other, they may even be combined in the same ulcer. But, while the chancroid is capable of frequent reproduction, until the system seems to lose its susceptibility to the poison, the hard chancre occurs but once, and, as a general rule, a person who has once had it is ever after exempt.

The gonorrhœal poison, unlike that of either chancroid or chancre, may arise spontaneously, or, at least, apart from any true contagion; as, for instance, from intercourse with women laboring under leucorrhœa, or the menstrual flow, from errors in diet, fatigue, excessive coitus, masturbation, or even from a gouty or rheumatic diathesis. Dr. Bumstead believes, also, that there is a true gonorrhœal rheumatism.

The subject of syphilization is, as a matter of course, discussed in the work before us. Dr. Bumstead agrees with Danielssen, that the efficacy of this plan is owing to the depurative process involved in the existence of a large number of chancroid sores. But, while conceding its beneficial effects, he expresses the opinion that this method must be shown by irresistible evidence to possess very great advantages over all others, before its advocates can hope to see it generally adopted in this country; and we think he is quite right.

Such are the leading doctrinal features of this excellent volume. A work of the kind has been needed for years, both by students and practitioners, and we are glad that the gap has been so ably filled. Many readers will welcome so skillful a guide through the mazes of doubt and perplexity which have surrounded the study of venereal diseases, and, we doubt not, that many a patient also will be unconsciously indebted to Dr. Bumstead for the light he has thrown upon this branch of practice.

In conclusion, we must commend the enterprise of the publishers in issuing a new medical work at so unfavorable a crisis. S. D. G.

Baron Larrey. A Lecture by D. Hayes Agnew, M.D., Surgeon to the Philadelphia Hospital; Lecturer on Anatomy, etc. Published for the Class. Philadelphia: Lindsay and Blakiston, 1861. pp. 59.

It is remarkable that the French nation, who

revere the name of Larrey, their own and the world's great model military surgeon, should have produced no full memoir of him. Perhaps the apparent neglect may be owing to the fact of his having really written, in familiar volumes, his own military autobiography, leaving to those who would honor his memory, nothing but simple eulogy. His memoirs of his campaigns are extraordinary records of his devotion, at the same time, to patriotism and to medical science.

In collecting from scattered sources the memorials of Napoleon's great military surgeon, Dr. Agnew has, in his usual erudite and laborious manner, done a great favor to the profession. This lecture is the most complete memoir of him which has yet been produced, and as our present national emergencies have renewed our interest in its subject, we commend its perusal particularly to those patriotic surgeons in our army who would emulate the noble devotion of Larrey.

The science of medicine does not consist in one idea nor a single remedy, the offspring often of a distempered imagination, "a maggot in the brain." The satire of Le Sage upon Sangrado and his apt pupil, Gil Blas, is as true in its application to our day as it was to his. Profuse bleeding and plentiful draughts of warm water, nor any other exclusive plan of treatment, is rational; nor does science consist in treating all throat ailments by excising the tonsils, clipping the palate, or cauterizing the upper air-passages with nitrate of silver, or probing so deeply with an imperfectly guarded instrument as to penetrate the gullet, and let out the life of the patient suddenly. Neither is statistical medicine entirely scientific. We cannot bring mankind, diversified as he is in character, both moral and physical, and changed from his original nature by modifying circumstances of sex, climate, culture, situation in life, and occupation, wholly under the tyranny of figures. Figures may be made to as often falsify as tell the truth, and fiction is more readily stated than fact.—*Dr. McPhail's Address.*

Physicians in the present day should justify the appreciation of Sir Thomas More, who found in the physicians of his time men of unsurpassed intelligence out of the immediate sphere of their profession. He that knew nothing out of his profession, and is redolent of the shop, may be readily conceived to have but an imperfect knowledge of even that. Science consists not in our profession, in experience alone. The old fogy, who rides still upon his rawboned horse along hard roads, and mounted upon a porcupine saddle, clad in cob-web breeches, while he could go easily on his journey's end upon a railroad, and yet prates of his experience, is then no representative of the science of our profession. The younger and enterprising are the great sources of intelligence with us; panoplied in science and ardent in the pursuit of knowledge, they give birth to the useful and practicable.—*Dr. McPhail's Address.*

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, DECEMBER 28, 1861.

THE SANITARY COMMISSION—*CUI BONO?*

We are not among the number of those who have expected any large amount of good to result from the organization and operations of the Sanitary Commission. We have never been able to see the necessity for its existence either as an auxiliary to the medical bureau of the army, or as a medium through which the large-hearted beneficence and sympathy of a patriotic people should reach the sick soldiers in the hospital or the wounded upon the battle-field. And yet we have been disposed to recognize it, to a certain extent, as one of the humane organizations of the day, whose purposes and ends, so far as they appeared, were good, and to give it due credit for all of good it accomplished. Accordingly we have from time to time chronicled its movements, commended its operations, where, in our opinion, justice required it should be done, and have felt no disposition to hinder its progress. But we frankly confess our faith in the organization has not been increased. We have seen no reason to question the correctness of our first impressions regarding it, viz., that *its plan of organization was too limited, that no necessity exists for it*, and that *the results to flow from it*, aside from the sanitary maxims it might inculcate or elucidate, would never be commensurate with the large conceptions of its originators. The sequel has only served to confirm these impressions.

In regard to its organization: it is the offspring of a particular locality; its original members were, with one exception only, from one city of this great republic, and that at a distance from the seat of government. The controlling power was thus vested in a single locality, and in individuals all of whom are not recognized as the most prominent exponents of sanitary science. It is a mixed commission, neither a medical nor yet a clerical, nor yet a legal, nor yet a military or a civilian's, but a mixture of law, theology, civil, and military experience, with medicine, legitimate and illegitimate, sandwiched between. Theology leads, law brings up the rear; while medicine forms a *quasi* medium of connection between the two, playing a second or soprano, where its voice should lead and guide the whole orchestra. So far as the local origin and control of the san-

itary commission is concerned, it is a matter of comparatively minor importance. In relation to that point we have only to say it should have embraced all the principal cities of the country. It should have comprehended in its initiative organization, the largest and best sanitary experience that could be found; it would then have commended itself as an association better worthy the co-operation of medical men. But the latter objection has the greater weight and force in our apprehension. The peculiar province of the science of medicine is invaded by this attempt to commingle lawyers, theologians, and civilians in a sanitary commission. The lawyer has his peculiar sphere, the theologian his, the civilian his. Suppose the lawyer should gather around him the mechanic, the artisan, as such, together with the theologian, to form "a commission of inquiry and advice" into the theological "interests" of the church? Or, suppose the theologian should organize a "mixed commission" of doctors, lawyers, haberdashers, civilians, and scullions, to give advice and council to the lawyer as to the best method of conducting his case or the application of law? Would not each of these departments of law and theology deem their province invaded by such a "commission?" and would not each member of those professions reject with scorn such attempted interference with their duties and prerogatives? So also the science of medicine has its peculiar province. It comprises in its scope all that pertains to hygiene as well as therapeutics; all that relates to prevention as well as the cure of disease. It is at once the originator and patron of sanitary regulations. In all these departments it has labored during the long years of the past in vain, if a "mixed commission" shall now wrest from it its crown.

But further, we have observed no necessity for the existence of such an organization. We find in its statement of "powers sought," and "specific objects aimed at" nothing that does not come within the appropriate purview of the medical bureau of the army. Nor do we find any evidence that the latter is inadequate to the performance of all its varied duties, after suitable time had elapsed to enable it to accommodate itself to the increased amount of labor required. A mighty army to be provided for in all its sanitary details of camps, hospitals, and supplies was improvised at once upon the department, set down as it were from the heavens above. And yet how rapidly and completely were all the necessary arrangements made to supply the wants of the mighty host! The machinery which has in all our past history wrought out noiselessly and unostentatiously the problem of all our sanitary regulations, and which has accumulated to itself all the rich experience of the wars of the past, quietly began its revolutions, giving to each camp and hospital, each sick and wounded soldier the benefits of "the fullest and ripest teachings of sanitary science." We have heard no complaint of inefficiency, "negligence or incompetency," in the members of the medical staff, nor yet of inability to adapt the system to the pressing emergencies of the time, to expand and enlarge its dimensions, or to increase its numerical force to such numbers as should render it vigorous and efficient. What necessity then, stern and compulsory, existed, which should require a "mixed commission" of law, theology, and medicine, to inquire into and advise in regard "to the sanitary interests of the United States forces?"

But grant that the necessity did exist; that in this war of colossal dimensions, in giving force and energy, and system to sanitary regulations in the camps of the noble volunteers; in locating camps and hospitals; in suggesting and carrying into operation means for "the prevention of sickness and suffering among the troops," and in providing a medium through which the overflowing benevolence of the people could manifest itself for the comfort and health of the army, a Sanitary Commission was urgently needed. Grant all this and more, if more be claimed, and then we put the question in all sincerity—What necessity *now—to-day—exists* for such an organization? If army and hospital supplies were ever deficient, they are not now. If camps and hospitals for the sick and wounded were ever badly located or indifferently organized, they are not so now to any great extent. If ambulances and modes of conveyance for the wounded on the field of battle were ever wanting, they are not now. If irregularities and crudities existed in the medical department of the volunteer forces, they are fast becoming remedied by the adoption of the same regular systematized plan of operations, so effective in the medical bureau of the regular army. If the soldier who fell sick, or who was wounded, had not at first all the care which humanity would have dictated, or all the comforts and delicacies which affection could tender, even that deficiency is in part supplied,

so that the necessity (if so that may be called which existed only in imagination) which gave birth to this "mixed commission" has now passed away. The enthusiasm which greeted its appearance upon the stage, and which showered upon it a profusion of delicacies and bade it be the swift-winged messenger to convey them to the lips of the brave but suffering defenders of the constitution and laws of our country, has passed away: the solid and substantial, the permanent and enduring should now take its place. The realities of war as well as its horrors are upon us, and the dictate of large-hearted patriotism is to strengthen and invigorate the institutions we have, and to admit no rivals to hinder their free, onward, vigorous movement.

But this point will appear still more clear and forcible by a more particular reference to the complete organization of the Medical Department of the Army, which has been in existence since 1799.

The medical staff of the regular army is composed, at this present writing, of about two hundred and forty surgeons. This number is constantly being increased by the addition of those who pass the rigid and thorough examination required previous to their appointment, before the Medical Board of leading army surgeons appointed for that purpose. This staff has a regularly organized Bureau, with different departments, each department having its special head. There is the Surgeon-General's Department, Chief of the Army Staff, Medical Directors for the different divisions of the army, and Medical Purveyor. Each has its separate duties assigned, and each its numerous aids, *attachés*, secretaries, clerks, etc., to carry into operation its various requirements.

And still further, as an invaluable auxiliary, the same general system is adopted in the several States, by means of which, in connection with the former, the whole vast army is supplied with ambulances, stretchers, etc., for the conveyance of the wounded, and with surgeons and assistants of acknowledged skill and ability. Under the same general arrangement hospitals, regimental and general, are provided, together with all the etceteras of attendants and nurses. By the same organization the immense army supplies, medicines, wines, hospital supplies, furniture, bedding, clothing, even to *musquito-nets*, are distributed.

The system is, therefore, complete in all its details, and for aught that has yet appeared to the contrary, practical and efficient in all its operations. Whence the necessity, then, for another and a distinct organization to accomplish the same ends? Is it a fair presumption that "fifteen camp inspectors," with a dozen "commissioners," consisting of clergymen and laymen in part, who know little of camp duties, to say nothing of medical science, are better qualified to assume the sanitary control of the vast army of five hundred thousand men, to "direct and suggest sanitary measures" for their welfare, than those who have been trained and matured in the school of medical and sanitary science? that an organization, having no authority whatever to enforce any, the most vital sanitary regulation, that depends solely upon the charities of the people for its existence and vitality, can accomplish the end for which the organization of the Medical Department of the army, with all the resources of the government at its command, was instituted? And, besides, the sanitary commission was organized ONLY "*to aid the medical bureau, without displacing it*, or in *any manner infringing upon its rights and duties*." Having performed its mission happily and well, how appropriate that it should retire to enjoy the laurels it has won!

We shall soon resume this subject.

EDITORIAL NOTES AND COMMENTS.

Hospitals at St. Louis, Mo.—We have before us a report of the members of a sanitary commission, appointed by Gen. Fremont, "*to co-operate with the Medical Bureau*, and *under its direction*, in the selection, fitting up, and furnishing of hospitals, and in making all needful arrangements for the care and comfort of the sick and wounded—with special authority given, from time to time, to provide for cases not contemplated by the army regulations, and in *furtherance of its general design*." In the prosecution of their object, thus definitely stated, the commission "claim no other merit than that of *intelligent* and *hearty co-operation* with the Medical Bureau," and as the result of their labors, covering a space of three months, they report that "more than *twenty-five hundred* beds have been provided, in convenient and well-furnished buildings, with every comfort and attention that the sick and wounded can require, besides accommodations for *one thousand* convalescents, (if so many should need them,) at Benton Barracks." Hospital cars were fitted up with beds, and a nurse to go back and forth daily,

on the principal railroad routes from St. Louis, to bring the sick and wounded, with the least possible amount of suffering, to that city, as a hospital center; beds were prepared at the railroad station in St. Louis to accommodate those arriving in the night; three large general hospitals, in good localities, capable of accommodating six hundred patients each, well fitted up, and furnished with all requisite conveniences, have been provided at St. Louis; a special hospital for measles patients has also been fitted up; particular arrangements have been made for small-pox cases, so as to isolate them from the balance of the army; male nurses have been employed, at a small expense to the goverment, with a view to leave the soldiers to their proper service; women nurses are also employed, mainly from the "Sisters of Charity," of "Mercy," and of the "Holy Cross," numbering not less than *sixty;* the minor arrangements have also been carefully attended to, so that the commission "believes the hospital system and service of St. Louis and its vicinity to be the most complete and the best managed in the United States."

The expenses of the "commission" have been very small. They have received a large amount of contributions from various portions of the country, the distribution of which they have so systematized and regulated as to secure the greatest possible amount of good.

The whole number of sick and wounded received in the St. Louis military hospitals, from August 10 to November 11, have been 5200, of whom 185 have died, and about 1800 are now under treatment. A great many have been received in a dying state, and have lived but a few hours. Very many others have suffered from maltreatment, before coming, or have been so broken down in constitution that no human means could avail for their recovery.

To produce this large number of sick, they say several causes have contributed; among which they mention:—

1. Bad systems of recruiting, by which hundreds are enlisted who are utterly unfit for service. One-half of those in hospital ought never to have been admitted into the army.

2. The severe duties of forced marches and countermarches, and of the guerilla warfare which has prevailed in this Department—which none but veteran troops could endure without suffering, and which have been almost the entering service of our volunteer troops. The wonder is that, at the end of three months, so many are alive.

3. The season of the year, which is that when intermittent and typhoid fevers principally prevail.

4. And perhaps more than all, the crowded tents and imperfect sanitary regulations of the camps.

In conclusion, the committee say, "conscious of no indirect or selfish motives, they have sought no other favor or reward than the opportunity which he (Gen. Fremont) so kindly gave them, of doing a work of humanity and patriotism faithfully and well;" and having accomplished their mission, "their brief official connection with him has ended." And they leave the regularly constituted authorities of the Medical Department of the Army to carry into complete operation the work they have so happily begun. This is as it should be. A voluntary organization for a specific purpose may do much to aid, in a great emergency, nay, may be an invaluable auxiliary. And it commends itself to the confidence of the people when it evinces no desire to worm itself into the place of long-established regulations; but fulfills, quietly and unostentatiously, its mission.

Podophyllin in Secondary Syphilis and Gonorrhœa.—Dr. Brown, of Hampton, N. J., communicates verbally the result of the administration of this remedy in a case of secondary syphilis, of some weeks standing, occurring in his practice.

The case had been under treatment for some length of time. When he first saw the patient he had chancre, and the glans penis was bathed in pus. He had also the peculiar copper-colored eruption upon the whole body, and his hair was falling off. The doctor prescribed the podophyllin in half-grain doses, combined with carbonate of soda, to prevent nausea, and ordered a local application of precipitated chalk, calomel, and nut-galls in equal parts, reduced to an impalpable powder. No other treatment was used, and in two weeks time the man was entirely cured.

Soon after, a case of gonorrhœa (a second attack) presented itself, and he resolved to test the podophyllin without the aid of any other remedy. He accordingly gave the remedy as in the previous case, and in six days the cure was completed. These two cases are not of course sufficient to establish the fact that podophyllin has or has not any certain power as a remedy in syphilitic affections, but, taken in connection with the fact that English physicians are testing its virtues as a substitute for mercury, renders it a subject of sufficient interest to direct the attention of the profession to a fair trial of its properties in those diseases.

The Natural History Collection of the British Museum.—The projected buildings for the great national undertaking, under the charge of Prof. Owen, will require, it is said, five acres of ground. The collections include the specimens in geology, botany, mineralogy, and zoology. Some idea of the magnitude of the plan may be gathered from the fact that there are several species of the elephant, each of which must be represented; seven of the rhinoceros, not one of which is a type of the others. A gallery 850 feet in length, by 50 in width, will be required for the skeletons of extinct animals, and another for birds, reptiles, and shell-fish, and the 150,000 species of insects. And the fact that the Japanese crab measures twelve feet from claw to claw, will show that the class *articulata* are not wholly contemptible, but will need large space for their display; and then again there are 2500 species of the mammalia, each of which must have a place. Taking all these facts together, the projected buildings will be found to be none too large; and when completed, and the specimens all properly arranged and classified, it will form a most magnificent panoramic view of the past and present of the living earth, in which the student of nature or of comparative anatomy may always find new incentives to study and research. As a school of natural history, or regarded as an educational project, it is one of the most magnificent ideas ever conceived by any nation. We hope it may be carried out.

The Use of Opium and Quinine.—Apropos to the statement in a recent number of the Reporter, giving the per cent. of these two remedies in the prescriptions of Philadelphia physicians, Dr. E. C. Tower, a pharmaceutist of long standing in Cincinnati, Ohio, gives the per cent. of the same article occurring in the prescriptions of the physicians of that city. We quote from the Cincinnati *Med. and Surg. News.*

"In one thousand prescriptions, opium and its preparations were found in 25 per cent.; quinine in 15 per cent.; other tonics 3 per cent. It will thus be perceived that while the per cent. in the case of opium is somewhat greater in Cincinnati, that of quinine is almost double. In respect to the seasons of the year in which quinine is most prescribed, he found that during the year 1860 there was no variation—in spring, summer, fall, and winter it seemed prescribed alike. In reference to other years he did not examine.

"The dose of opium, he reported, as rarely exceeding a grain; that of morphia ranging from one-eighth to one-half of a grain, the average about one-fourth. The dose of this latter has materially increased in the last twenty years—formerly it ranged from one-tenth to one-sixth. Whether this increase is due to the manufacture—its properties having been deteriorated in increasing the beauty of its appearance—or to a change in disease, or to the almost universal indulgence in narcotic stimulants, as tea and coffee, tobacco, malt and spirituous liquors which now prevails to a greater extent than ever, he is not prepared to express an opinion. He thinks, however, the latter condition of things has had an influence. The largest amount of morphia he ever knew prescribed was twenty-two grains in twenty-seven hours, in the case of a courtesan who had delirium tremens, and was an opium eater."

A New Remedy for Albuminuria, Diabetes, and various forms of Heart Disease.—Mr. J. Lightfoot, Jr., of London, England, has succeeded in making a magnetic phosphate of iron which is readily dissolvable in citric acid, and which, in the few instances in which it has been used, has proved quite effectual in the cure of the diseases above mentioned. It is given in the form of solution, does not precipitate with the syrup aurantii, like most of the salts of iron, and forms an agreeable chalybeate tonic. A cure is mentioned of a man fifty-six years of age, a laborer, who had for many years been afflicted with valvular disease of the heart, with hypertrophy; had suffered at times most frightfully from palpitation, and had not been able to do any work for the last three and a half years, the least exertion producing the most distressing effects. Even walking across the room would render him completely helpless for several minutes. He took five minims of the magnetic phosphate of iron, three times a day, for a week, when he was vastly better. The treatment was pursued for a month, when he was able to resume his work.

Another case is that of a female, who for nine months had suffered more or less from severe pain in each renal region, œdema of the lower extremities, and general debility. The specific gravity of her urine was 1008, and was perfectly coagulable at a temperature of 200° Fahrenheit. She was ordered to take the following mixture three times a day: solution of the magnetic phosphate of iron, six minims; iodide of potassium, one grain; water, one drachm. After taking eight doses, the albumen was diminished one-half, and on the seventh day not a trace of albumen was to be found. Specific gravity of urine was now

1021; the œdema of limbs was fast disappearing; the patient regained her appetite, and in three weeks time was convalescent. She now enjoys excellent health, is able to perform her household duties, and expresses herself as "perfectly well." With such results from its administration, the remedy is certainly worthy of trial. The particular formulæ for the preparation of this salt of iron is not given, nor are we informed why it is named magnetic phosphate. It is, however, said to be similar in its composition to the phosphate of the sesquioxide, but differing from it in being more soluble in hydrochloric or nitric acid, but *the* acid which most readily and freely dissolves it is the citric.

Appointment of Quacks as Surgeons in the American Army.—The *British American Journal*, in speaking of the appointment of Mr. Craven to the position of Brigade (not *Brigadier*) Surgeon, says: "Surely Dr. Finlay will see the propriety of canceling such an appointment as this, which must have been done in ignorance of the man's character." We would remind our contemporary that the Surgeon-General has no power to "cancel such an appointment." The examinations for the post of surgeons in the army are made by a Board, appointed from the medical staff, whose decisions are final in regard to qualifications, and the candidates receive their commissions from the President, through the Secretary of War. Mr. Craven is not a surgeon of the *regular* army, but of the volunteer forces, which removes him still further from the Surgeon-General, and renders it impossible to displace him, unless by complaint made and sustained against him before a proper army tribunal. The whole affair is a disgrace to the profession, and one of the keenest edges of it is its virtual indorsement by the administration.

Our valued contemporary, the *British American Journal*, is usually very scrupulous in giving due credit for any articles it quotes from our columns; its failure to indicate the source of the excellent article on Narcotics, which we are glad to have it copy, is therefore excusable.

Tight Lacing.—We had supposed this most silly and destructive practice was entirely abandoned. But it is not. The wasp waist, the most complete caricature of all beauty or comeliness, is yet occasionally seen, but it is not so common as in former days. An instance of its direful effects we find in a late journal, and we transfer it to our columns as a sad warning to those who still persist in the suicidal practice.

"At the Hôtel-Dieu, the great hospital at Paris, a young girl of eighteen lately presented herself to M. Breschet, for his advice. On the right side of her throat she had a tumor of variable size, but never bigger than one's fist. It reached from the collar-bone as high as the thyroid cartilage, (called in common language, Adam's apple;) when pressed downward it wholly disappears, but returns as soon as the pressure is removed; it is indolent, soft, and elastic. It is observed to be largest when the chest is tightly laced in corsets. In short, by placing the ear on it, the murmur of respiration can be heard in the tumor, which proves that a protrusion of the lungs has taken place; or, in other words, that this poor girl has been laced so tightly that her lungs, having no longer sufficient space in their natural situation, are squeezed out of it, and are forcing their way up along her neck."

Adulteration of Pickles.—In the *Lancet*, for November 30, we find the result of an analysis of thirty-three samples of bottled fruits and vegetables. Of these, seven were *greengages*, and four were colored with copper; five were *gooseberries*, three of which contained much of that article; one, *rhubarb*, adulterated in the same way; ten were *pickles*, and included those so nicely put in glass jars, in some of which copper was found; in fine, of the thirty-three samples analyzed, no less than twenty-one or nearly two-thirds contained copper. The bottled fruit, it is well understood, does not come in contact with copper at all in the process of preservation. Its presence must therefore be the result of deliberate adulteration. In the case of pickles no direct addition of copper is made, the requisite amount of that metal to produce the intense and beautiful green color, so much admired by the lovers of that vegetable, is readily obtained from the copper vessels, upon which the vinegar acts as a solvent. The metal is thus converted into an acetate of copper, or, in common parlance, verdigris, an article which enters into the composition of green paint, and is exceedingly poisonous. In the preparation of bottled fruits, the sulphate of copper, commonly called blue vitriol, is used, the salt being dissolved in the liquor, and added to the bottles when filled. A deleterious and poisonous agency is thus directly added to the fruit, not for the purpose of improving its flavor or adding to

its value, but merely to gratify the sense of sight with a beautiful green color. The practice of making pickles in copper vessels is common in our own country, but there is no necessity for it, and the fact that the vegetable is thereby to an extent poisoned, should lead to an entire abandonment of the practice. So also with the *gherkins, mixed pickles,* and *West India pickles,* so common in our markets, so neatly put up in glass bottles, the fact now so well known that to a greater or less extent *blue vitriol* gives them the beautiful color, should induce every one to refuse to purchase them. In this way the iniquitous adulteration would be remedied.

Incompatibles.—A correspondent, referring to an article in the Reporter for October 12, inquires whether spts. ætheris nitrici and potassæ iodidi are incompatible, provided the former is entirely pure. He says, "if it be not entirely free from acid, upon the addition of the iodide, the iodine will be set free, giving a beautiful color to the mixture. In this manner the purity of the spirits of nitre may be tested. I have often administered these remedies together, and never thought them incompatible."

Visiting Lists. — A correspondent suggests that visiting lists containing a classified list of "diseases and their remedies," are of very little value to a practitioner of twenty years standing. He thinks they ought to be "classified" in his head by that time. As for the "cash book," he recommends the omission of that portion of it for his latitude, and substitute "trade book." His suggestions are in ample time for 1863. Meanwhile we send him *Gross's Military Surgery,* a book which, in his opinion, will be of more value to him than the *Visiting List.*

Dr. J. W. Lodge, Surgeon in Gen. McClellan's division, has resigned on account of ill health.

The Amenities of War. — It is pleasant to record the exhibition of humanity amid the horrors and cruelties of war. In the battle at Hilton's Head, S. C., Dr. E. S. Buist, a surgeon in the Confederate Army, was supposed to be killed, but his body could not be found. After the Federal troops took possession of the place, as the men were digging out anew a bomb-proof passage, they discovered a body buried in the sand. In the hand was found a case of instruments, bandages, etc., showing that it was a surgeon. On his handkerchief was the name Buist. It seems he was sitting on his campstool in the passage, waiting to be in readiness when he was needed. A shell penetrated the bomb-proof to the timbers, and, exploding directly above him, killed him and buried him at the same instant. A gold watch was found upon his person, and his dress indicated affluence. His effects were gathered up, and a lock of his hair severed, with the design of sending them to his family. The body was carried by twilight to a quiet spot in the woods, where a grave was dug in a place easily identified, a musket box serving as a coffin, and was buried. In a few days after, a flag of truce came from the Confederate lines to identify and procure his body. Every facility was afforded for the purpose. The body was taken up, the instruments and effects all carefully returned, and, much to the surprise of the Confederates, a portion of the Federal forces formed in procession to accompany the remains to the landing place, whence they were to take their departure for his mourning friends.

Correspondence.

NEW YORK CORRESPONDENCE.

Sera tacitis pœna venit pedibus.—Tibullus.

The regular meetings of societies, medical and literary, at this period of the year, betray no evidences whatever of the troubles now agitating North and South. Quorums find no difficulty in being formed, papers of vital import to science and hygiene continually appear before the reading public, and a general diffused desire to ascertain the singular and instructive principles of existence is even on the increase. Though "swill milk" is still procured, vended, and partaken of freely, one fact cannot be disputed by the sturdy renovators of reform—*i.e.* those who are the victims know the cause, and be the blame their own if sad disease afflicts a family now cognizant of all its baneful influences. After all, the grand precept of self-preservation will work more improvements in the various communities than any set system of extended regulations. When we sit for hours listening to debates, absorbing the clear thoughts of learned minds, and eagerly digesting the sage aphorisms of experienced intelligence, can the effort of induction be so perfectly per-

formed; or is it equally convenient for both lecturer and audience to do justice to the subject while the head is swimming with its dizzy thoughts and undue heat, the carelessness of some poor usher, crowds the brain with an unventilated atmosphere? Nor is the medical profession free from this misfortune. Many, many times have soundest essays been forgotten or unheard when a few inches of open window would permit the anxious and susceptible recipients to comprehend cold truth. This could be rectified at once, and with no difficulty, were a "calorificator," in the shape of one hired man, to be stationed by thermometers, not only to perceive their rise and fall, but to act speedily upon the indicated change, and remedy what must retard the progress of deep cogitation, or the satisfactory result of healthy quietude. Let each clergyman, professional speaker, or peregrinating lecturer see that a responsible agent do watch the workings, crowded gases, and foul emanations from congregated beings, and, my word for it, more sense would rise from the discussion of astutest facts, less evils would be associated with a visit to a modern court-room, or the sanitary readings of unsanitary men. A man of pithy words, once said of preaching: "No conversion after twenty minutes." I take the liberty of adding: "No influence upon your hearers after seventy degrees."

All this may seem superfluous, but it was only the other evening that I saw a medical gentleman faint during the convention of professional philanthropists, and had he not yielded to the want of pure air, I should have had to faint or leave myself.

Gourmet.

Os magna sonaturum.—Horace.

At the last meeting of the Academy of Medicine, Dr. John H. Griscom, a prominent leader in all sanitary reforms, read a most interesting paper made up from the experience of the learned and indefatigable Gugenbuhl, of European fame. The subject was that of the "Cretans" and their idiotic growth, combined with the magnitudinous development of their thyroid bodies, and other evidences of that bane of certain regions designated bronchocele. Some maintain that the valleys breed this poison; others that deficiency of nutritive material and hygienic laws increase what nature has already missed in the poor specimens of sad propensities. Dr. Detmold argued in favor of the absence of iodine in the water, as a strong reason for this condition. The subject will be discussed at length on some future occasion.

Next in order came the "Paper" of the evening — an elaborate, carefully digested, clearly enunciated, eminently interesting, and most comprehensive dissertation on the art of "Cutting Throats." The treatment was diversified by several subdivisions—*e.g.* Relations of pulmonary apoplexy to suffocation? The loss of how much blood will be fatal? Can a woman make a cut upon her own throat five and a half inches long, and to the bone, with a razor (Yes)? Can suffocation ever produce bloody effusion into the pleural cavities (No)? The concurrence of suffocation and hemorrhage when the trachea and carotids are completely severed? The value of ecchymosis of the tongue, as indicating asphyxia from any cause; and many other important points.

The speaker and author, Dr. Alonzo Clark, maintained a consecutive and most minute investigation relative to a certain case of murder or suicide, as the circumstances might determine or the clearest intellect decide. The impression left upon the mind, after mature cogitation, was that of De Quincey's original essay on making away with those who need division of their primitive carotids; Monsieur Dupin's Parisian perseverance in discovering the true perpetrators of concealed homicides, and a clear conviction of an unusual precision in details bordering on the bacheloric principle of action, thoughts, and treatment.

Dr. Elisha Harris, recently returned from Washington and the neighboring hospitals, states that only eight per cent. of the soldiers are sick at the present time, half of that number besides being only slightly incapacitated.

Bellevue Hospital is a model in many ways—strict attention, good food, and proper medicines are administered, but there exists one sad, nay, most improper arrangement connected with those afflicted with the graver forms of disease. For instance: the other day, while walking through the wards, a mother, dangerously ill with the typhoid fever, was seen dying in the same room, not only with others in the different stages of the like disease, but directly opposite her own daughter, aged sixteen. Imagine the serious effect upon her sick child—the death and impressive removal of her mother. A ward should

be provided for those about to die, or fast sinking, lest their presence provoke worse symptoms in those around, and depress all. This is worthy of attention. Gourmet.

ALBANY CORRESPONDENCE.

Albany Medical College and Medical Instruction. Albany, N. Y., December, 1861.

The Annual Commencement of this Institution was held in the Assembly Chamber on Monday evening, December 28. The exercises were opened with prayer, by the Rev. Mark Hopkins, President of Williams' College, who was formerly a physician. Eighteen young gentlemen were admitted to the Degree of Doctor of Medicine. The valedictory address was delivered by Dr. James McNaughton, the veteran Professor of Theory and Practice. It was in his own peculiarly felicitous style; paternal, like a father giving parting advice to his sons. Eminently practical, it derived additional interest from personal reminiscence and experience, while it was constantly enlivened by a flow of good humor. The address was designed to point out to the beginner in practice, some of the circumstances essential to success in professional life, and to point out some of the causes by which success may be thwarted. The address was well timed and appropriate. The Albany Medical College offers more than ordinary advantages to the student who would gain a thorough knowledge of medical science. The professorships are filled by men who are not only learned in the science, but who have a large practical experience. Dr. March has been a teacher of surgery for nearly or quite forty years, and has gained a distinguished reputation throughout the country. With increasing years, he has lost nothing of his enthusiastic love of his profession, and he imparts enthusiasm to all who listen to his instructions. Dr. McNaughton has always been a tower of strength to the institution. With possibly one or two exceptions, he is the oldest teacher in the country. Thoroughly learned in anatomy and in the principles of medicine, diseases and their treatment are discussed with an attractive familiarity that renders him one of the most acceptable of teachers. The Chair of Materia Medica and Physiology and of Obstetrics could not easily be filled with better men than Drs. Townsend and Quackenbush; while Chemistry and Medical Jurisprudence has an ardent, faithful exponent in Dr. Porter. The science of toxicology is becoming a specialty of the latter, and the many vexed questions that arise in medical jurisprudence under the administration of modern poisons, are receiving his special attention and elucidation. No student should consider himself ready to take a high position in the profession, unless he has spent at least several months in the laboratory under private instruction, and until he shall have become familiar with the various tests for the urine, and for the more common poisons. The laboratory is large and amply furnished with chemical apparatus, and with all the convenience for their use, and I know of no place where so much time and attention can be given to the private pupil. Chemistry and toxicology are departments of science which the medical student is most likely to underestimate, and to consider as unessential to a *practicing* physician, and to which consequently he gives the least possible attention. His great error stares him in the face, in after-life, when he reaches the position to form a true estimate of their importance. But this importance should be pressed upon pupils by their teachers, and such advantages as are now afforded should not be neglected. The large museum offers a broad and almost complete field for the study of pathology and pathological anatomy. It is not saying too much for it to say that it is not excelled in the country, and those of the several institutions that I have visited, fall far short of it. The City Hospital adjoins the college, and clinical instructions are there given in the several departments of medicine and surgery. Scarcely more could be crowded into a lecture term of sixteen weeks, with any advantage to the student.

Great as should be the attractions of Albany to the medical student, and enviable as is the reputation of the institution already, there are resources which, if made available, would place the institution in an enviable position. To its clinical teachings might be added a department of insanity. Students usually have no knowledge of insanity other than from books, and from them alone the lines that divide sanity from insanity can be drawn. But practical questions are not so easily decided; besides, there are the causes, the progress, and the physical changes in insanity, which need illustrating by clinical teachings, and this could be done by bringing the County Insane Asylum, with its one hundred patients, as an auxiliary to the college instruc-

tion. Insanity, as a sequel to accidents and diseases, is of vast importance; but usually forms no important part of medical instruction.

It would be practical also to bring the Alms House Hospital, with its hundreds of cases, to subserve the purpose of the medical teaching of the college. Here are diseases of a large pauper population quite different in the modifications of their several types from those met with in the City Hospital and in the better classs of private practice. The proximity of those institutions to the college makes the plan feasible.

The wants of the student at the present day require that in every college there should be a Chair of Microscopic Anatomy, and the uses of the microscope; most students have no practical knowledge in this department, which is becoming of increasing importance. Connected with this department should be Medical Ethics, Sanitary Science, and Hygiene. The latter are subjects of greatest magnitude. It is not only in the camp and in the army that this necessity find ample illustration, but in the regulations that pertain to corporations and residences. The public look to physicians as learned on these subjects, while in too many instances they have only the knowledge which observation and common sense teach. There is a demand for the education of students in this particular, and a professorship should be inaugurated in every medical college to meet it.

A thorough and complete medical education is *indispensable*, and the student should fully understand what is comprehended in it, before he undertakes the task of its accomplishment. More time is required for study, and for instruction by lectures and demonstrations. Success to that college which is first to prolong the lecture term to eight months, and the period of study to four years, before it confers its degree. S. D. W.

ARMY CORRESPONDENCE.

Extract from Brigade Surgeon King's Report on the sanitary condition of the "Army of the Potomac," communicated for the Reporter.

Headquarters, 1st Brigade. P. R. V. C.,
Camp Pierpont, Dec. 23, 1861.

Morris J. Asch, M.D., *Ass't Surgeon, U. S. A.*

Sir:—In compliance with Special Order No. 196, from Headquarters, McCall's Division, I have the honor herewith to transmit reports of the surgeons of this brigade, in answer to questions submitted on the sanitary condition of the army. As the last of the reports was received only this morning, my own report thereon, which is required to-day, must necessarily be hurried.

I beg leave to answer the questions proposed, as follows:—

I. As to the number of cases of fever in the brigade, the three last monthly reports of the surgeons show 539 cases of remittent, and 37 of typhoid fever, in the four regiments, comprising a mean strength of 3200, officers and men.

II. As to the characters of the fevers—the surgeons represent two distinct forms as existing: one, the bilious remittent, or fever of "malarial origin;" the other, the true typhoid, "the typhoid fever of the North." In my opinion it is impossible to draw such a line of distinction respecting these fevers, or to divide the cases into two well-defined classes; the one exhibiting, in its group of symptoms, the ordinary diagnostic marks of typhoid, and the other, of remittent fever. On the contrary, there is a certain *tout ensemble*, or general form, belonging to all the cases, by which we recognize one affection, though varying in its features in different cases, just as we know the physiognomy of man, however diversified in its manner of expression. I have observed the characters and so-called diagnostic signs of both variously coexisting and complicated in the same subjects; and it would be easy to arrange the facts observed in a tabular statement, showing in one column the distinguishing marks of the "malarial," and in another of the typhoid disease. But the facts are so united and commingled in the cases presented that, if required in regard to many to classify them with either disease, it would be difficult to say to which they belong. The following, for example, are thus found variously coexisting:—

EVIDENCES OF THE DISEASE OF "MALARIAL ORIGIN."	EVIDENCES OF THE TYPHOID DISEASE.
1st. It made its appearance in the latter part of summer, on the Potomac—a malarial region	1st. It continues to prevail after the heavy frosts, and in winter.
2d. Most patients have the disease developed suddenly.	2d. Most cases have a protracted convalescence.
3d. Epistaxis is rarely observed—I have seen none.	3d. Many cases show rose-colored spots.
4th. Few cases I have seen show great tendency to diarrhœa.	4th. Few cases—none that I have seen—showing nausea and bilious vomiting.
5th. Very seldom see much tympanitis—*often* none.	5th. Many cases show suffusion of the eye, dusky countenance, and mental habitude.
6th. The fever has distinct remissions, and is found in company with true intermittents.	6th. The duration of the disease, fully marked, mostly runs to three or four weeks—too long for remittents (?)
7th. In the first stages the tongue is furred with white or yellow coat, and expanded and indented at the edges.	7th. In the last stages the tongue tends to become dry, cracked, and covered with sordes.
8th. Numerous cases of other malarial diseases, as intermittent neuralgia, occurring; also jaundice, and the fever patients sometimes showing jaundiced urine.	8th. The occurrence of cases of troublesome suppurations, or abscesses about the parotid glands, coming on as the complication or sequel of the fever.
9th. Tested by the "effects of remedies," we see a marked influence of quinine in relieving the headache, stupor, and delirium of the early stages of *congestive* cases, arresting exacerbations of fever—and some-	9th. Tested by the "effects of remedies," we see certain good results from use of turpentine in some cases, and of nutritious stimulants, as "milk punch," in all, with a manifest necessity of obviating, by supporting

times acting favorably in the latter stages—with dry tongue, and other typhoid signs.

10th. Tested by the causes in operation, we have exposure to the night air while on guard, previous to the attack in localities where intermittents prevail.

11th. Tested by the post-mortem appearances, I have found the loss of color in the liver well marked, and distended gall-bladder in two cases examined.

means, the tendency to the adynamic state, and to "death by asthenia."

10th. Tested by the causes in operation, we have the crowding of men together, in badly ventilated tents and in filthy camps. These have not been sufficiently policed.

11th. Tested by the post-mortem appearances, I have found inflammation, thickening, and ulceration of Peyer's glands in three cases examined, and enlargement of the mesenteric glands in one.

But, not to pursue this investigation further, I will ask, are we justified in regarding all these facts as having weight, as I think we are, and in determining from the combination in the same subjects of the characteristics of two diseases that we have a "mixed affection?" Or, if not, shall we take the rose-colored eruption and affection of Peyer's glands as pathognomonic, and call the disease typhoid fever; or, on the other hand, take the characteristic mark of the influence of quinine as the specific for the malarial poison, or some other sign, and call the fever a "bilious remittent?" In my opinion it is only by patiently collecting the facts noted by regimental and hospital surgeons, who have recorded or made careful observation of their cases, that we can arrive at just conclusions on the subject—a subject the investigation of which, by a competent officer detailed for the purpose, would not be without its uses to the service.

III. As to the proper treatment—I have observed the most satisfactory results from the use of quinine, if given in the doses of sixteen or twenty grains in the morning, and repeating it in the same or smaller doses for several successive mornings in the early periods of the disease, with the use of a little blue mass and laxatives, and febrifuge mixtures when indicated, with the early resort to nutritious stimulants and liquid nourishment. Nitrate of silver, sugar of lead, and spirits of turpentine are useful on the development of certain enteric symptoms, for which they are recommended in the books. The inflammatory and congestive complications are treated successfully in the usual way by sinapisms, cupping, and epistaxis.

* * * * * * * *

Respectfully submitted by
Jas. King,
Brigade Surgeon.

The Vermont Troops.—Dr. Edward Phelps, of Windsor, who is Professor in the Hanover (N. H.) Medical College, and a member of the Vermont Board of Medical Examiners for candidates for surgeons in the army, has visited the five Vermont regiments at Camp Griffin, at the request of the Governor, "with a view of ascertaining with accuracy, the amount and character of sickness there existing, together with the cases of mortality, and this with a view of learning in what way efficient aid could best be furnished," and has made a lengthy report to the Governor, which we find in full in the last *Vermont Chronicle.*

From this report, which is dated December 12th, it appears that the total strength of the five regiments is 4939; and that of this number a little less than one-fourth, or 1086, are excused from duty on account of sickness, classified as follows:—

1. Excused from duty, but on foot, and not wholly confined to tent	550
2. Excused from duty, and mostly confined to tent or in company sick-tent	245
3. Excused from duty, and sick in hospital	291
Total	1086

Those of the *first class* were complaining of colds, ordinary catarrhal affection of the mucous membrane of the lungs, throat, and head; also diarrhœa, rheumatism, and some mild forms of disease, and includes quite a number of men who were not of sound constitution when they entered the service, and owing to their frequent appearance on the sick list, will soon be discharged from service.

In the *second class*, the diseases are measles, remittent, intermittent and typhoid fevers, jaundice, and some other affections of liver and digestive organs.

"In the *third class*, the diseases existing are typhoid fever, typhoid pneumonia, jaundice, rheumatism, dysentery, bronchitis, as a sequel of measles, very rarely diphtheria and phthisic, and some variety of diseases of no very dangerous character, which may, nevertheless, render it best for the subject to be discharged."

On the 29th of November, there were 72 from the Vermont brigade in the various hospitals in and around Washington, 58 of whom were from the 5th Regiment, who are under the care of surgeons of the regular army, and well provided for.

In relation to the cause of the diseases, Dr. Phelps says that remittent and intermittent fevers are common diseases in the region of Camp Griffin, and might occur in an unacclimated person, however careful of himself. But the diseases which prove most mortal, typhoid pneumonia and typhoid fever, have no necessary connection with the climate of Virginia, but are of camp origin, and accompanied by a state of profound prostration, (or asthenia,) shown in the great and persistent depression of the pulse, cold skin, and other similar appearances. It is this asthenia that destroys life, more than the local affections of the bowels, liver, or lungs. As to the causes which induce this asthenic state, we make the following extract from the report:—

"It should here be stated that the assemblage of regiments, perhaps fifteen in number, which compose Camp Griffin, is only a part of the vast assemblage of troops, extending four miles through the region bordering the Potomac, whom, as General McClellan says, 'no man may number.' These have been lying upon the same ground for weeks; and although a great deal of care has been used to keep the camps clean, yet,

everywhere, disease incident to camps has arisen. The only reason that can be given why disease prevails throughout the whole range of camps, then, is because they have remained stationary so long. The cause is not in the men, but in the saturated soil, and the silent, unseen contamination of the waters and atmosphere. A deathly influence from these gives to all disease of whatever name an asthenic form, and causes it to prove mortal far beyond what could occur away from the region of camps. Upon making careful survey, I was enabled to convince myself that in one regiment at least, the location was such as to favor a more speedy action of the cause alluded to, and was happy to find that my views were indorsed by the proper authorities to such an extent that the regiment was moved to a very fine location before I left."

NEWS AND MISCELLANY.

The Resignation of Dr. McMurtrie.—Dr. Henry McMurtrie, Professor of Anatomy, Physiology, and Natural History, in the High School of Philadelphia, has resigned his chair. We have not heard the cause of this resignation, but from a knowledge of Dr. McMurtrie's merits as a teacher, and his eminent scholarship, we are sure the institution has lost a professor who, in his peculiar position, can hardly be replaced.

By every graduate of the High School, Dr. McMurtrie is much respected; and although as pupils they have felt his severity as a disciplinarian, his devotion to his duty as a teacher, and to their welfare, has endeared him to them. This expression will, we are sure, be heartily responded to by all his former pupils, particularly by those now holding prominent positions in the medical profession, who acknowledge an indebtedness to him for the rudiments of their medical education; and we hope that a consciousness of this grateful remembrance will be a satisfaction to him in his declining years.

Besides his popularity as a professor of natural science, Dr. McMurtrie is known to the community, in a literary way, as the translator of Cuvier's great works on zoology, the *Animal Kingdom*, and as a public lecturer on his favorite sciences.

The Institute for the Blind.—The number of inmates in this institution is 175, an increase of 10 over the same period last year. During the year 23 were received, 11 discharged, and 2 died. Of the pupils, Pennsylvania furnished 153; New Jersey, 13; Delaware, 5; other States, 6. The goods manufactured by the males amounted in value to $12,120 03; by the females, to $1038 29. The receipts of the past year were $36,807 13; the expenditures, $43,072. The deficiency being made up by a balance of *last year*.

Veterinary Surgeons.—A bill has been introduced in Congress to have a Veterinary Surgeon attached to each division, with an assistant to each regiment of cavalry or light artillery. It is apprehended that suitable persons cannot be found to fill the positions. There need be no fear of that. The applicants will be as thick as the locusts of Egypt, and the government will find abundant material from which to choose. The idea is certainly a good one. There is no good reason why that noble and useful animal, the horse, which is likely to suffer seriously from change of climate and insufficient attention, should be deprived of the benefits of good medical skill in his ailments.

Brown's Bronchial Troches.—The recipe for this famous bronchial remedy is as follows, viz.:

℞.—Pulv. ext. glycyrrhisæ, ℔j;
" sacch. alb. ℔jss;
" cubebæ, ℥jv;
" acaciæ, ℥jv;
Ext. conii, ℥j. M.

Appointments. — Dr. Frank M. Hiester, of Berks County, at one time Assistant-Surgeon of the Fifth Pennsylvania Regiment, has been appointed Brigade Surgeon in the Army.

Dr. Thomas R. Dunglison, of this city, has received the appointment of Acting Assistant-Surgeon in the Army, and has been ordered to the Hospital at Alexandria.

A Patented Cure for Toothache.—The *Scientific American* says that a patent has just been taken out in England, by M. A. Prenslan, for curing toothache by what he terms "oil-paper liquid." This is obtained by submitting paper to destructive distillation in a retort. The liquid comes over and is condensed in the worm of the still, and then applied to the tooth with a pellet of cotton. The liquid thus obtained is nothing more than *creosote*, which is now used by many persons for allaying the pain of ulcerated teeth. Crude coal oil possesses the same properties, and may be used for the same purpose.

The Vermont Cavalry Regiment.—Dr. George S. Gale, of Bridport, is the surgeon, and Dr. P. O'Meara Edson, of Chester, is the assistant-surgeon of this regiment, which has just gone to the seat of war.

Health of Confederate Troops at Nashville.—A correspondent estimates the number of sick at the army hospitals in Nashville, at from 8000 to 10,000. The two hospitals on College Street occupy an entire square, and are crowded to excess. The prevailing diseases are pneumonia and smallpox. The troops from Texas, Louisiana, and Mississippi suffer most, the changeable climate seriously affecting them and inducing pneumonia in the most aggravated form. The Texan Rangers are almost all on the sick list. Deaths are frequent, and supplied the draymen with their principal business. It is no uncommon sight to see a drayman carting away the bodies of dead soldiers. There is a third hospital on Market Street, near the public square, a vast five-story brick edifice running back toward the Cumberland River.

Health of the Troops at Camp Curtin, Pa.—Surgeon-General Henry H. Smith officially contradicts the report of extraordinary sickness at this camp. He says, the sick now in camp are only two per cent. of the troops, and there is nothing of an unusual or serious character. The health of the camp is closely watched by surgeons of undoubted ability, who have everything they require promptly furnished to them by the State.

Appointment of Medical Cadets.—In accordance with an act of Congress passed at the last session, the following medical cadets have been appointed, making the full number authorized by law:—

W. A. Anderson, John W. Allen, Lewis Applegate, F. G. H. Bradford, Lewis H. Bodman, Chas. H. Bowen, Edward Curtis, James S. Drake, Rufus Delafield, Chas. A. Devendorf, Chas. H. Dougal, Harry Gray, S. G. Gray, E. Hutchinson, George N. Hopkins, E. R. Hutchins, John N. Lyman, Elias Lester, Abiah Light, William Longshaw, F. De Moyne, M. K. Moxley, S. G. Minassion, Charles A. Milton, G. V. R. Merrill, M. J. Davis, W. D. F. Day, Rezin P. Davis, F. A. Dudley, A. C. Dyer, W. C. Eichelberger, Norton Folsom, Samuel L. Fitch, Thomas Francis, W. H. Gardner, Jas. S. Gregory, Horatio Paine, A. F. Pick, J. M. Pillsbury, Jacob Roberts, Henry A. Robbins, Eben J. Russ, Edward Sterror, John Sullivan, R. A. Stephenson, Charles W. Spayd, Geo. W. Taylor, C. P. Wilson, Samuel Weil.

Medical Board.—By order of Major-General Dix, a Medical Board, composed of Brigade Surgeons R. W. Gilbert and C. C. Cox, and Robert Bartholomew, Assistant-Surgeon, U. S. A., will meet, in that division, at such times and places as the Medical Director shall designate, "for the examination of the professional qualifications, physical ability, and moral standing of such medical officers as he, the Medical Director, may designate to appear before the board." It strikes us this is a move in the right direction, and if generally followed in each division, might "weed out" incompetency and illegitimacy.

The regular medical schools of Cincinnati have each about 60 students in attendance. There are no lectures in progress at Louisville or St. Louis.

Statistics of Vaccination in Pennsylvania Troops.—The results of vaccination of three regiments of Pennsylvania Volunteers are thus given:—

	Vaccinated.	Successful.
54th Regiment	455	287
56th Regiment	119	73
84th Regiment	206	196
Unattached companies . . .	288	231
Total	1068	787

The men were chiefly from the interior of the State, and no data are given as to their previous vaccination.

Dr. D. S. Hyde, of Huntingdon, is Surgeon, and Dr. William Church, of Crawford County, is Assistant-Surgeon of the 110th Regiment, P. V.

Appointment.—Dr. M. D. Knox, of this city, has been appointed Assistant-Surgeon in the U. S. Navy, and, since September 21st, has been on duty on board the steam gunboat Penguin, which forms one of the blockading squadron under the command of Commodore Dupont.

The number of medical students in Dublin, Ireland, is 806.

Measles in the Army.—Surgeon Lyman reports, in the *Boston Med. and Surg. Jour.*, that the 44th New York Regiment has had one hundred sick with measles during the last three weeks.

India-rubber Stoppers for Bottles.—A correspondent of the *Boston Medical Journal* calls the attention of the profession to a recent invention, taking the place of corks and ground-glass stoppers for bottles. Stoppers are made of vulcanized India-rubber, which are said to be indestructible by acids, do not get fast in the bottles, and are sold at a price which will insure their general use.

The Want of Ambulances.—General Ord, in his report of the affair at Drainesville, says: "Some of the wounded had to be brought the whole way on stretchers, while, I am informed, that the Pennsylvania ambulances for this division are lying empty at Washington, by orders (I suppose) of the circumlocution office."

The want of ambulances among the Pennsylvania regiments has been repeatedly complained of, although the Surgeon-General of the State had a proper number supplied and delivered to the authorities in Washington. If red tape must be allowed its sway in military affairs, we would suggest that it be compelled to envelop matters the loss of which would produce less suffering than want of ambulances for the wounded.

Condemned.—Ten Jewish and eight Christian medical students, of the University of Warsaw, have been condemned to serve as common soldiers in the Russian army at Orenburg.

Dr. Stephen Griswold, assistant surgeon of the 38th New York Regiment, who was among the prisoners taken by the Confederates at Bull Run, died a few days since at Charleston, S. C., of typhoid fever. He was thirty-four years of age.

Appointment.—Dr. George F. Gale, of Brattleboro', has been appointed surgeon of the 8th Regiment Vermont Volunteers, forming one of the Butler Brigade; and Dr. H. H. Gillet, of Corinth, assistant surgeon of the same regiment. Both are excellent appointments.

Virchow a Politician.—It is said that Virchow, the pathologist, is about to become a member of the Prussian Parliament. If Prussian politicians resemble those in this country in their habits, we would be inclined to consider Virchow's scientific utility at an end.

A New Weapon of Warfare.—Mr. B. Greenough, of Bradford, Vermont, has succeeded in perfecting his apparatus for the ejection of *liquid fire*, and was recently called to Washington to make further experiments. Mr. Greenough is the inventor of the non-explosive burning fluid, and has been engaged in his chemical investigations for a number of years until he has produced what now promises to be a terrible auxiliary in warfare.

The experiments at Washington were made under the direction of a Board, consisting of Capt. G. V. Fox, Assistant Secretary of the Navy, Capt. Dahlgren, Capt. Wainwright, and Lieut. Badger. A target was erected upon a platform fifty feet long by thirty feet wide, the target being made of solid oak timber three feet in thickness. The fluid was ejected in an inert state, from a pipe of three-sixteenths of an inch in diameter, and was thrown some thirty or fifty yards before it reached the target. At a distance of several feet from the nozzle the fluid ignited, expanding to a diameter of two feet, with an intense combustion, which covered the target and the platform with liquid fire. The fire was apparently inextinguishable, burning readily on the water and consuming the target. It emitted dense fumes and smoke which darkened the atmosphere, and would have suffocated any human being who had come within its influence. The experiment was quite successful.

Experiments were also made with shells filled with this liquid, and with equal success. The composition, the secret of which is known only to the inventor, promises to deal death to foes, and is a great advance in science.

From our acquaintance with Mr. Greenough, and our knowledge of his entire success in rendering burning fluid non-explosive, we infer that the experiments above referred to will also be entirely successful, and add a terrible weapon to modern warfare. We record Mr. Greenough's addition to modern science with pride and pleasure.

Hippophagy.—A grand hippophagic banquet has been recently held in Algeria, under the auspices of M. de Croix, Veterinary Surgeon. Horseflesh was served in every variety of form, and a young ass, roasted whole, formed a conspicuous *pièce de resistance.*—*London Med. Times.*

Obstetric Mortality.—At a recent meeting of the London Obstetrical Society, Dr. Tyler Smith stated that the whole obstetric mortality of England and Wales exceeded annually three thousand. Of this number more than one thousand died of puerperal fever, nearly three daily.

Soyer's Description of the Personal Appearance of Florence Nightingale.—M. Alexis Soyer, the French cook, who is so well known by his eminent services in the Crimea, gives, in his Culinary Campaign, the following description of Miss Nightingale :—

"She is rather light in stature, fair in complexion, and slim in person; her hair is brown, and is worn quite plain; her physiognomy is most pleasing; her eyes, of a bluish tint, speak volumes, and are always sparkling with intelligence; her mouth is small and well formed, while her lips act in unison, and make known the impressions of her heart—one seems the reflex of the other. Her visage, as regards expression, is very wonderful, and one can almost anticipate by her countenance what she is about to say; alternately with matters of the most grave import, a gentle smile passes radiantly over her countenance, thus proving the evenness of her temper; at other times, when wit or pleasantry prevails, the heroine is lost in the happy, good-natured smile which pervades her face, and you recognize only the charming woman. Her dress is generally of a grayish or black tint; she wears a simple white cap, and often a rough apron. In a word, her whole appearance is religiously simple and unsophisticated."

Questions in Anatomy.—Professor Ford has prepared for his classes a series of anatomical questions, of which we have received the first fasciculus, containing more than 500 questions on osteology. They are very full, as may be supposed from their number, and cover the structure and relations of all the bones; and as there are no answers printed with them, they form a very valuable catechism.—*Berkshire Med. Jour.*

Flying Machine.—A Mr. Edwards says in the *Scientific American*, that he has invented a flying machine which will attain a speed of five miles a minute. In a small machine, which he has already made and practiced with, the propelling force is a powerful steel spring, which, with the proper gear attached, sustained the machine for about two and a quarter minutes. The apparatus weighed seventy-seven pounds, and on this was placed a weight of sixty-two pounds. The machine was fastened to a post, around which it revolved at a distance of thirty feet. It flew at the rate of one and a half miles per minute. The inventor feels sure that he has solved the problem of flying like birds through the air.

Hypertrophied Heart.—At the London Pathological Society, a heart was exhibited, which weighed forty-six and a half ounces. The patient, a man aged forty-two, had suffered from acute rheumatism and pleurisy, in the second attack of which he died. The heart was fifteen and a half inches in circumference, and six inches in length.

The Cholera in British India.—Cholera is still prevailing with great fatality among the British troops. The men are represented as disheartened and prostrated. The commander-in-chief has directed to officers to keep the soldiers amused, and ordered the bands to play for them.

Cancer in Dogs.—A correspondent of the *Lancet* says that scirrhus frequently occurs in dogs.

A large staff of medical officers have been ordered to Canada from England.

Free Ventilation of School-rooms. — Dr. Laycock says, in the *British Medical Journal*, that "it is most lamentable to see the overcrowding in preparatory schools for young children, usually held in what are or have been private houses, and in which the air supply is wholly insufficient for even maintaining health at all. If school-masters were thoroughly imbued with the simple but fundamental truth, that more oxygen is necessary for the brain in action than in repose, they would never rest until they had secured for themselves and their charge at least as ample a supply of air in the class-rooms as is thought necessary for the sleeping-rooms of paupers and prisoners."

The Scientific American.—The commencement of a new volume of this remarkably excellent and cheap journal, occurs to us as a proper time for directing attention to it. We receive no exchange which presents so much original and practical reading matter, calculated to interest and benefit every one, as the *Scientific American*, and its price, which is but *two dollars* a year, places it within the reach of all. No other periodical does so much to popularize science in all its varied departments, and as a journal for the office, the laboratory, the workshop, or the household, it is unequaled.

A Curious Verdict.—The London *Medical Times* says that a coroner's jury has been investigating a case in which, it appears, that a young man agreed with a girl that they would be drowned together, and for this purpose they tied themselves together with tape and leather strings and jumped into the Surrey Canal. After they had been in the water some time, the tape broke and the woman was drowned, while the man saved himself by swimming, after, it is said, "endeavoring to rescue the deceased." The coroner's jury found that the poor girl was *felo de se*, and that the man was an abettor of the murder.

The Finding of the Original Obstetric Forceps of the Chamberlens'.—At a recent meeting of the London Medical and Chirurgical Society, Dr. R. Lee alluded to the finding of Peter Chamberlen's original obstetric forceps, which were sent in 1818, by Carnadine, to the Medico-Chirurgical Society. They were found at Woodham Mortimer Hall, Essex, in an old closet in the mansion, where they had lain above a century and a half. Hugh Chamberlen, in his translation of Mauriceau's work, which was published in 1672, thus alludes to the forceps, which was a secret instrument in the family: "I will now take leave to offer an apology for not publishing the secret I mention we have, to extract children without hooks where other artists use them, viz., there being my father and two brothers living that practice this art, I cannot esteem it my own to dispose of, nor publish it without injury to them; and I think I have not been unserviceable to my country, although I do but inform them that the fore-mentioned three persons of our family and myself, can serve them in these extremities with greater safety than others."

Medical Society of New Jersey.

The Annual Meeting of the Medical Society of New Jersey will be held at New Brunswick, on the 4th Tuesday of January, (the 28th prox.,) at 7 o'clock P.M. The place of meeting will be determined by the Committee of Arrangements. Delegates are requested to bring with them certificates of appointment; but they will not be received unless all arrears to the State Society are paid by the several District Societies.

W. Pierson, Rec. Sec'y
Of Med. Soc. of New Jersey.

December 28, 1861.

MARRIED.

Parkhurst—Sloat.—In Christ Church, Ramapo, on Wednesday, Dec. 11, by Rev. James S. Barnes, G. H. Parkhurst, M.D., of Peekskill, to Miss Mary W. Sloat, of Sloatsburg.

Parrott—Grubb.—In this city, Dec. 24, by Rev. Philip H. Mowry, W. J. Parrott, M.D., of Princeton, N. J., to Miss Georgette G. Grubb, of Morrisville, Pa.

Richards—Doland.—In New York, on Monday, Dec. 23, by Rev. T. L. Harris, George W. Richards, M.D., of Orange, N. J., to Miss Lydia Amelia Doland, of that city.

Shoemaker—Heller.—On Nov. 19, Dr. J. M. Shoemaker to Miss Sarah C. Heller, both of Van Buren, Ohio.

Smith—Tichenor.—At Irvington, Nov. 13, by the Rev. James M. Brown, at the house of the bride's father, Laura A. Tichenor and David S. Smith, M.D.

Van Wagener—Green.—On the 18th ult., at Madison, by Rev. Samuel L. Tuttle, James E. Van Wagener, M.D., to Lucetta Green, daughter of the late Jonathan E. Green, of Indiana, and niece of the late Dr. H. P. Green, of Madison.

DIED.

Berry.—In West Constable, N. Y., on the 16th inst., Philo Berry, M.D. He graduated at the Vermont Medical College in 1859.

Evans.—On Saturday, Dec. 28th, Mary Louisa, wife of Dr. Edmund C. Evans of Chester County, Pa., and daughter of the late Dr. Benjamin Allen, of Hyde Park, N. Y.

Answers to Correspondents.

Subscriber, N.Y.—There is, if we are correctly informed, but one Naval Board for the examination of candidates for assistant-surgeons of the Navy. This Board meets as occasion requires. Its last session, we believe, was at New York. It is is not, of course, limited by State bounds in its reception of applications. When or where its next session is held, we are not informed.

The proper course to pursue, is to make application to the Secretary of War or of the Navy, according as you desire a post in the army or navy.

In our opinion, a knowledge of the classics would be of great advantage to you in your examination, though we believe it is not a requirement of the Board. (See Reporter, vol. v. No. 23, p. 633; and vol. vi., p. 146.)

Dr. D. C., Ind.—The solution of morphia proper for subcutaneous injection in neuralgia is ½ to one grain dissolved in the smallest possible quantity of water. The quantity to be used depends upon the urgency of the symptoms. The physician must be the judge. It is injected by means of an instrument made specially for that purpose.

Dr. A. S., Pa.—An intelligent, active, energetic practitioner will no doubt find a good opening in any of the cities or large places of the West.

Communications Received.

Connecticut—Dr. N. Banks, with encl.; Dr. L. Gayner, with encl. *District of Columbia*—Dr. R. K. Stone, with encl. *Illi-*

nois—Dr. A. L. Barr, with encl.; Drs. D. W. Stormout, I. Tenbrook, each with encl.; Dr. B. Woodward, with encl. *Indiana*—Dr. Calvin West, with encl.; Dr. F. C. Eckelman; Drs. Dougan, Clark, J. A. Blackwell, each with encl.; Dr. F. C. Eckelman, with encl. *Iowa*—Dr. M. Marbourg, Dr. F. H. Sawyers, with encl. *Kentucky*—Dr. W. D. Gay, Dr. W. Miluer, with encl.; Dr. D. Johnston, with encl.; Dr. T. P. Dudley, with encl. *Maine*—Drs. N. E. Smart, O. Ross, L. Richards, J. W. Morton, S. C. Sibby, H. B. C. Green, W. R. C. Provencher, D. Smith, A. Bacon, N. C. Robinson, E. B. Chamberlin, C. Moore, J. F. Gilman, M. Dodge, S. Fitch, J. Buzzell, T. A. Foster, W. A. Harvey, each with encl.; Dr. T. H. Jewett. *Maryland*—Dr. J. H. Taylor. *Massachusetts*—Dr. C. B. Smith. *Michigan*—Dr. C. T. Southworth, with encl. *Minnesota*—Dr. A. H. Jones. *New Hampshire*—Drs. A. Perry, W. Leighton, each with encl. *New Jersey*—Drs. B. A. Watson, C. C. Phillips, each with encl.; Dr. R. B. Brown, with encl.; Dr. R. M. Cooper, with encl.; Dr. J. S. Linabery, Dr. H. H. Tichenor, with encl.; Dr. E. P. Nicholls, Dr. S. T. Locke, Dr. J. F. Shoemaker, with encl.; Dr. R. S. Smith. *New York*—Dr. Henry N. Fisher, Dr. John H. Griscom, Dr. H. B. Horton, Dr. E. R. Howland, Dr. M. Calvin West, with encl.; Dr. I. K. Leaning, Dr. Eli Small, J. Burke, each with encl.; Dr. E. Stewart, Dr. B. S. Manly, with encl.; J. G. White (2), with encl.; Dr. L. Bauer, Dr. G. K. Smith, Dr. S. W. Francis (2), Dr. O. Roten, W. A. Townsend, Drs. Wm. S. Babbitt, S. Winne, each with encl.; Drs. C. G. Bacon, J. V. D. Coon, J. R. Gregory, O. C. Gibbs; Drs. J. G. Meacham, Peter Cleary, L. D. Isham, Dr. T. W. Blatchford, with encl.; Dr. Chas. Drowne. *Ohio*—Dr. S. P. Hunt, with encl.; Drs. Griswold and Ballard, with encl.; Dr. Wm. D. Towner, Dr. H. P. Kay, Dr. W. J. Kelley, with encl.; Dr. J. Baggs. *Pennsylvania*—Dr. E. Hottenstein, with encl.; Dr. T. B. Shugert; Drs. A. B. Dill, J. B. Bralier, D. D. Loop, each with encl.; Dr. J. Collins, with encl.; Dr. S. W. Virtue, Drs. F. S. Kohler, S. R. Gibboney, R. Martin, A. Rothrock, D. D. Mahon, S. A. Martin, J. G. Lightner, J. McCulloch, G. W. Thompson, H. Orlady, J. M. Irvine, S. Thompson, W. B. Roberts, R. Clark, A. B. Calderwood, Emil Lietze, J. A. Landis, each with encl.; Dr. F. W. Vandersloot, with encl.; Dr. John Ream, Dr. A. F. Illig, with encl.; Dr. A. G. Walter, Dr. G. Ellis, Dr. J. W. Thompson, Dr. J. Breitenbach, Dr. John Curwen, Dr. J. S. Whildin; Drs. C. W. Backhus, F. G. Bloom, J. P. Thompson, J. W. Wengert, F. C. Doyle, J. Compher, B. F. Harry, A. B. Madden, A. Carl, J. K. Davidson, W. Grubb, E. D. Rankin, S. Pollock, each with encl.; Drs. J. W. Kerr, A. L. Cressly, A. L. Peirce, T. H. Elliott, W. B. Erdman, J. G. West, G. W. Hoover, P. R. Wagenseller, G. W. C. James, A. R. Savidge, A. M. Miller; Dr. A. M. Cooper, with encl. *Rhode Island*—Dr. O. Bullock, with encl. *Vermont*—Dr. C. L. Allen, Drs. C. & H. Porter. *Virginia*—Dr. H. R. Wirtz, with encl.; Dr. J. C. Spear.

Office Payments.—Drs. James Wright, West, Haskell, Fegtmayer, Albright, Mannel.

Pamphlets Received.

We acknowledge the receipt of a pamphlet entitled "An Effort to Shorten the Duration and Diminish the Pain of Labor;" and one on "The Use of Anæsthetics in Midwifery." By B. Fordyce Baker, M.D., Obstetric Physician to Bellevue Hospital, New York. (From the author.) Also "Sanitary Legislation, Past and Future: the Value of Sanitary Reform and the True Principles of its Attainment." By John H. Griscom, M.D., Attending Physician of the New York Hospital, etc. (From the author.) Both of these pamphlets are too valuable to be laid aside without further consideration; we, therefore, reserve a more particular notice of them for a future opportunity. The subject of the latter is one which possesses peculiar interest for our investigation at the present time.

Vital Statistics.

Of Philadelphia, for the week ending Dec. 28, 1861:

Deaths—Males, 150; females, 136; boys, 85; girls, 67. Total 286. Adults, 134; children, 152. Under two years of age, 88. Natives, 196; Foreign, 72. People of color, 5.

Among the causes of death, we notice—Apoplexy, 4; convulsions, 14; croup, 10; cholera infantum, 0; cholera morbus, 0; consumption, 46; diphtheria, 13; diarrhœa and dysentery, 2; dropsy of head, 3; debility, 14; scarlet fever, 16; typhus and typhoid fever, 9; inflammation of brain, 5; of bowels, 5; of lungs, 21; bronchitis, 2; congestion of brain, 5; of lungs, 2; erysipelas, 2; hooping-cough, 0; marasmus, 2; small-pox, 15.

For week ending December 29, 1860.....251
" " December 28, 1861.....286

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 1986·29.

Of Providence, R. I., for Nov., 1861:

Deaths—Males, 41; females, 38. Total, 79. Children under ten years of age, 25. Natives, 61; Foreign, 18.

Among the causes of death, we notice—Apoplexy, 2; congestion of brain, 5; disease of brain, 1; inflammation of brain, 2; disease of bladder, 1; cancer, 1; cholera infantum, 2; consumption, 14; convulsions, 2; diarrhœa, 5; dysentery, 2; diphtheria, 2; typhoid fever, 4; disease of heart, 2; hooping-cough, 2; hydrocephalus, 2; disease of hip, 1; disease of kidneys, 1; disease of liver, 2; malformation of spine, 1; marasmus, 4; old age, 3; peritonitis, 1; pneumonia, 5; congestion of lungs, 1; scarlatina, 1; scrofula, 2; suicide 1.

Population of Providence, 1860, 50,669. Mortality 1 in 641·40.

Of New York, for the week ending Dec. 16, 1861:

Deaths—Males, 199; females, 202; boys, 103; girls, 109. Total, 401. Adults, 189; children, 212. Under two years of age, 140. Natives, 253; Foreign, 148; Colored, 8.

Among the causes of death, we notice—Apoplexy, 2; infantile convulsions, 17; croup, 12; diphtheria, 13; scarlet fever, 35; typhus and typhoid fevers, 11; cholera infantum, 0; cholera morbus, 0; consumption, 58; small-pox, 9; dropsy of head, 13; infantile marasmus, 24; diarrhœa and dysentery, 2; inflammation of brain, 14; of bowels, 7; of lungs, 27; bronchitis, 11; congestion of brain, 13; of lungs, 6; erysipelas, 3; hooping-cough, 2; measles, 2. 208 deaths occurred from acute disease, and 41 from violent causes.

Population of New York, 814,277. Mortality, 1 in 2030·61.

Medical Directory.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth Street.

Medical Clinic on Wednesdays and Saturdays, at 10 A.M., by Dr. Gerhard.

Surgical do., at 11 A.M., by Dr. Geo. W. Norris.

Medical Library of the Pennsylvania Hospital.—Open on Wednesdays and Saturdays.

Philadelphia Hospital.—Medical Clinic on Wednesdays and Saturdays, at 9½ A.M., by Dr. J. L. Ludlow.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A.M., by Dr. D. H. Agnew.

Wills Hospital for the Eye and Limb.—Clinics, Wednesdays and Saturdays, at 11 A.M., by Dr. William Hunt.

Howard Hospital, Lombard Street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P.M. Monday and Thursday—Dr. Turnbull, at 1 P.M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P.M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1; and Dr. Morehouse, at 5 P.M. Monday and Thursday—Dr. Meigs, at 5 P.M. Tuesday and Friday—Dr. Atkinson, at 3½ P.M.

Jefferson Medical College, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P.M., by Dr. S. D. Gross.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesdays and Saturdays, at 1 P.M., by Prof. Smith.

Dispensary Service every afternoon at 3 P.M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street.—Clinical Lectures daily, (except Sunday,) from 2 to 4 P.M., by Dr. Goodwillie.

Philadelphia Lying-in Charity.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning, at 9 o'clock, by Dr. Edwin Scholfield.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, Nos. 272, 273. PHILA., JANUARY 4, 11, 1862. New Series, Vol. VII. Nos. 14, 15.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By Louis Bauer, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

I. DEFORMITIES OF THE FEET.

Gentlemen:—The anatomical structure of the human foot is a most admirable and perfect piece of mechanism. Composed of twenty-six bones, fastened to, and articulating with each other, the foot combines a high degree of firmness and elasticity. It is, therefore, well adapted as a foundation for the body in the erect posture. It assumes for locomotion the manifold positions required, and preserves, under all physiological necessities, strength and reliance. To achieve so complicated an object with the greatest economy, nature has given to the foot a double arch, one between the heel and the ball of the great toe—*the longitudinal arch*—the other between the two margins of the foot supported by the heel, the capitulum of the first and the tuberosity of the fifth metatarsal bone—the transverse arch. The two arches form a niche at the sole of the foot, thus causing its great strength. The plantar aponeurosis adds materially to the capacity of the longitudinal arch for bearing the weight of the body, and its strength prevents, under ordinary circumstances, any breaking down. The transverse arch is not so strongly supported.

The short transverse ligaments permit expansion to such a degree as to bring the fibular margin of the foot down to the floor, as can be readily demonstrated by an experiment. By placing your foot in water, and afterward standing with the entire weight of the body upon the floor, the external margin is imprinted to its full extent, and, so firmly, that a piece of paper cannot be removed from below that side, whereas the internal margin leaves no trace behind. For ordinary locomotion the toes seem to be dispensable appendices. But, if the foot is fully extended, the body being raised upon the capitula of the metatarsal bones, the toes come into play by enlarging the base. Pliny's remark, "digiti gressii solum apprehendunt," is, therefore, most appropriate.

The tibio-tarsal articulation is so constructed as to permit the approximation of the foot to the leg, (flexion,) to an angle of 78° 2″, (Weber,) and the extension may be carried to an angle of 120°. Besides flexion and extension, the foot is capable of performing other motions in which the ankle-joint takes, however, a very limited part. In the rotatory movements on the longitudinal axis, the astragalus slides a little forward. Adduction is chiefly carried out by the astragalus and the scaphoid; abduction, by the calcaneus and cuboid bones.

In greater rotations of the foot, the calcaneo-astragaloid articulation comes into operation.

The muscles affecting ordinary flexion are the *tibialis anticus* and the *peroneus tertius;* in the higher degrees, the *extensor digitorum longus* and *pollicis longus* materially aid.

A similar arrangement exists in the extension of the foot, the ordinary extensors being the muscles that terminate in the Achillis tendon, *gastrocnemius, soleus,* and *plantaris;* whereas the higher grade of extension is aided by the *tibialis posticus, peroneus, longus* and *brevis, flexor digitorum longus,* and *pollicis longus* muscles.

Adduction of the foot is exclusively effected by the *two tibiales* muscles; while abduction is carried out by the *three peronei* muscles *conjointly.*

As to the nerves supplying the different groups of muscles, Bonnet's experiments have disclosed

that the peroneus nerve furnishes the motor fibers to the extensors of the toes and the peronei muscles; while the tibial nerve supplies the rest. That his observations are correct, we have been enabled to ascertain clinically.

We cannot further proceed into the details of the anatomical structure of the foot without exceeding our limits; but we request you to give them your special attention, for, on future occasions, we shall have to refer to them.

From the anatomical structure and the mechanical importance of the foot, it should be inferred that it is frequently the subject of deformity and malposition. And this is actually the case. Nay, more, they are not only the most numerous, but likewise of a stereotyped nature.

A considerable portion of pedal deformities are *congenital;* the larger number, however, is acquired. As to their remote causes, we can often trace them to troubles of the nervous system. They rarely consist in defective development of some of the bones of the foot, (Bilroth.*) Inflammation of the tibio-tarsal articulation likewise gives rise to them, through reflex action. Of a considerable fraction we know nothing positive of their causes.

For the more stereotyped deformity of the foot, the generic term "*talipes*" has been introduced and applied to all distortions from the normal position, with or without partial displacement of the articular surfaces of the tarsal bones.

According to certain malpositions of the foot, the varieties of talipes have received different appellations. If the internal margin of the foot is raised, and the toes inverted, it is called *club-foot, talipes varus;* if the plantar arch is broken down, the external margin of the foot elevated, and the toes everted, we have *talipes valgus,* or *flat-foot;* in *talipes equinus* the heel is abnormally raised from the ground, and the foot placed in permanent extension; or *talipes calcaneus,* when the foot occupies the reverse position of the latter. Combinations between the previous simple forms of talipes are respectively termed equino-varus; varo-equinus; equino-valgus; calcaneo-valgus, etc.

The exact diagnostic discrimination of the various complicated forms is a matter of great importance, and exercises a material influence upon the treatment to be adopted for their respective relief.

* Archive der Klinishen Chirurgie, vol. i. heft 1, Berlin, 1860.

1. *Talipes Equinus.*

The semiotic character of talipes equinus is briefly as follows: the foot is more or less completely extended, and, in exceptional cases, may be placed in straight continuance with the leg. The remaining mobility is in the reverse ratio to the degree of extension; that is to say, it diminishes with the increase of the latter. The foot rests upon the ball, and chiefly, however, upon the ball of the large toe. The plantar arch is materially increased, and the toes, more especially the large one, are drawn back. The Achillis tendon is found to be extremely tense, and is rendered still more so by attempting to flex the foot. The plantar aponeurosis is likewise shortened, most likely by virtue of the plantar muscles. The extensor digitorum communis and pollicis longus are but rarely contracted, and if we find them so, it is most probably in consequence of the habitual action of those muscles to prevent the toes from interference.

The place which the foot rests upon is invariably covered with a thick and massive callosity. The entire extremity is greatly attenuated and arrested in its growth and development; the more so, the longer the distortion has existed. In addition, we observe sluggish capillary circulation and diminished temperature of the member, which manifest their effects more particularly in cold weather, when the limb becomes bluish red, mottled, and loses all its caloric, Figs. 3, 4.

Fig. 3.

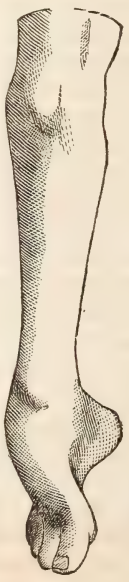
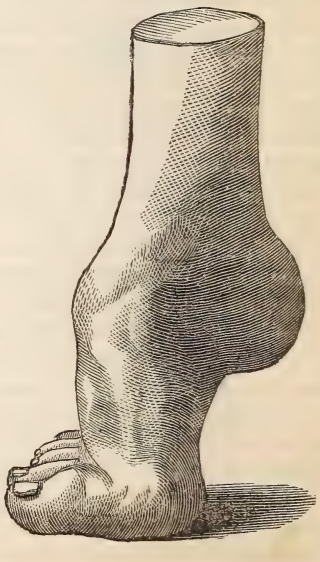


Fig. 4.



The foot is of course shorter than its fellow, partly from arrested development, partly on account of the increased arch; and it is indeed very rare that it acquires its proper size. In front of the tibio-tarsal articulation, we clearly notice the trochlea of the astragalus, the superior surface of which lays almost in the same plane with the tibia. The malleoli are not sufficiently developed, and the diameter of the articular axis is generally diminished by one-eighth of an inch and more.

Though the gastrocnemius and soleus muscles are chiefly involved in talipes equinus, we have met with instances in which the entire group of extensor muscles participated in the deformity. This is particularly the case in serious lesions of the spinal cord; and once we observed it as the sequel of a fracture of the lumbar portion of the spine. Whether the tibialis posticus, the two peronei, and the flexor muscles of the toes are involved, is by no means so easy to determine, because the tendons of those muscles are bound down to the grooves of the malleoli by serous slides, and the aponeurosis of the leg is particularly thick and strong about the ankle-joint. Sometimes the tendons have left their respective grooves and moved to the outside of the malleoli from the continuous stretch, and this may facilitate the diagnosis; but at others, we do not become aware of the difficulty until the Achillis tendon has been divided without producing the desired effect.

As a general thing, the contracted muscles have lost all susceptibility of being acted on by the galvanic current, yet their powerful extension gives rise to unbearable pain. This fact seems to demonstrate that the muscular structure is in a state of contraction to the extent of its capacity, or the substituted tissue is devoid of all contractile power. It is certain that innervation has not entirely been lost while pain can be provoked by extension.

After the division of the tendons, many months may elapse before the galvanic current makes any impression, and, in some instances, the contractility of the muscles is gone forever.

As might be expected, in talipes equinus of long standing, the bones themselves participate in the deformity. Their malformation exercises, of course, a material influence upon the prognosis.

We have observed two or three cases of talipes equinus in which most of the symptoms just enumerated were wanting; and in fact all that characterized the trouble was the extended position of the foot and the retraction of the tendo-Achillis. Moreover, the extremity was well maintained, of ordinary temperature and color. The prevailing cause proved to be *arrest of growth* of the extremity from unknown causes, and the patients had extended the foot in order to elongate the limb and to walk with greater facility. In course of time, they had lost all volition in reference to the extensor muscles, which became fairly contracted, and the malposition belonged undoubtedly to talipes equinus. It would be unwise to interfere in those cases. In all respects, the position of the foot is serviceable, and certainly preferable to a high boot.

Talipes equinus is but rarely congenital; most usually it is *acquired*, and *depends on affections of the spinal cord and its investments*. We have exceptionally observed talipes equinus as the consequence of posterior curvature of the spinal column; fracture of the first and second lumbar vertebræ; and once, of a wound in the back. The injury was inflicted near the tenth dorsal vertebra, by a strong-bladed knife. From the fact that the knife stuck fast, and was removed with difficulty, it seems to be justifiable to infer that the blade had entered the bone. The wound closed without delay. A few days after the accident, the patient, a strong man of about thirty-five years, was attacked with what seemed to be severe cramps in his left calf, which eventually terminated in tonic contraction of the entire group of extensors of the foot, and in a high degree of talipes equinus.

It is rather interesting to observe the process by which talipes equinus is superadded to the already existing paraplegia. We remember a few cases in which the paralysis of the lower extremities had existed some years without any change, when suddenly, and without apparent cause, the patient was attacked with severe rigors, lasting for some hours. During the same time the patient noticed painless contractions of the extensor muscles of the foot, which became permanent, and gave rise to extreme talipes equinus. In other cases of paraplegia, the commencement of talipes equinus initiated a partial return of sensation and motor power, as in the case of fracture of the spine.

In regard to the *prognosis* of talipes equinus, we have to consider the deformity *per se*, and the nature of its cause. The former is comparatively trifling unless the tarsal bones are so much mal-

formed as to prevent or aggravate their readjustment, which, however, is not so often the case.

As a general thing, you have to deal only with the contracted muscles, and division is the sovereign remedy. But if the case has existed from infancy, the bones have in form accommodated themselves to their abnormal position, the tibio-tarsal articulation is crippled, then the prognosis is rendered doubtful, and the case may be even irremediable.

In order to accomplish a cure, both malposition and malformation of the tarsal bones have to be corrected, which, at best, is a slow process, and, as already stated, may not be accomplishable at all.

The second point that enters upon our prognostic consideration is, the proximate cause of the trouble. We may have succeeded in removing the deformity by appropriate measures, and in keeping the foot by mechanical appliances in proper position.

This is but palliative relief, and is not a cure.

In order to achieve success, you have to re-establish proper innervation of the afflicted extremity, promote its nutrition and development, and give tone to the muscles. Such a result we are mostly debarred from accomplishing, however assiduously and perseveringly we may advance with our auxiliaries, and therefore we should be guarded in our prognosis, and promise no more than we are capable of realizing. In children, however, the prognosis of talipes equinus is more favorable, for it has been observed that with the relief of the distortion, the nutrition, growth, and development become improved. It must not be forgotten, however, that the extremity very rarely keeps pace with its fellow.

2. *Talipes varus. Club-foot.*

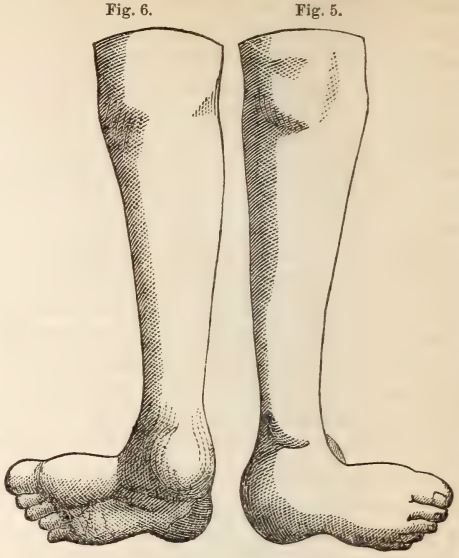
Simple club-foot is rare. That deformity which is generally designated as club-foot is a combination of varus and equinus. In the succeeding discourse, we shall keep that form in view.

Varus equinus is a frequent deformity. There is hardly a community, however small, among which could not be found one or two cases. Most usually it is of *congenital origin,* and very seldom acquired. If so, club-foot is superadded to pre-existing talipes equinus, and paralysis of the peronei muscles.

The anatomical derangement in club-foot is somewhat complicated. We shall discuss it at some length, in order to render it more comprehensible.

In the specimen before you, Eigs. 5 and 6,* representing the highest grade of club-foot, and taken

Fig. 6. Fig. 5.



from a man twenty-seven years of age, you notice most of the general symptoms enumerated under the head of equinus, viz., *attenuation* of the extremity, *arrest of growth* and *development.* And what you cannot perceive in this plaster cast, we may be allowed to add: *loss of temperature, mottled appearance, etc.* The difference in the length of this extremity and that of its fellow amounted to *three inches* at the end of a three years' and at last successful treatment. In placing the cast into the same position in which the patient used his deformed member, you can realize the full extent of the distortion.

You notice thus, that the foot is longitudinally so turned, that its external margin stands on the floor, whereas the internal margin is uppermost. The foot touches the ground a little anteriorly from the external malleolus, where, from pressure, *a large callosity* has formed. Again, you observe that the back of the foot has a *forward,* and the plantar surface a *backward* direction, which, of course, implies *inversion of the toes.*

In comparing this with another cast, derived from valgus, you perceive the *directly opposite condition.* In varus, the dorsum has been *elevated* and rendered more *convex;* in the other, the dorsum is almost *flat.* In the former, the plantar arch is *greatly increased;* in that of valgus

* The same specimen in the posterior aspect.

it is *entirely broken down*, so that no arch at all remains, and the tarsus comes in contact with the floor. Furthermore, here is an *inflexion* or *infraction*, noticeable at the internal margin, which has the effect of *approximating heel and large toe;* in valgus, the infraction comes from the external margin, and, in the highest grade of this deformity, tends *to bring the heel nearer to the small toe.* In our case, the cuboid, the anterior portion of the calcaneus, and the tuberosity of the fifth metatarsal bone protrude; in the other, as stated, it is chiefly the scaphoid bone.

We now propose to investigate the morbid anatomy of club-foot, the result of which has practical bearing upon its treatment. The conflicting statements of authors on the pathologico-anatomical condition of club-feet, derived from autopsy, seem to be strange to the inexperienced; not so, however, to those who have given some attention to the subject. There is a great *variety* in club-feet, which necessarily must present somewhat *different anatomical aspects.* The greatest difference accrues, however, from the *duration* of the deformity.

In most infantile club-feet, the difficulty merely seems to consist in contracted muscles, and as soon as that has been overcome the bones may be reduced to their proper relation. This, however, is scarcely possible in club-foot of long standing, having served already in locomotion. In those, we find the malposition of the foot much greater, and the bones themselves materially altered in shape. With this explanation, we shall readily reconcile the apparently contradictory reports of Glisson, Camper, Joerg, Clossius, McKeever and others on one hand, and those of Paletta, Cruveilhier, Loeb, Tourtual, Little, W. Adams, Weiss, and Brodhurst on the other. The results of the anatomical investigation of the former resolve themselves in the following aphorisms:—

1. That the primitive formation of the bones is unnatural and incomplete.

2. That the bones, being originally imperfectly formed, become injured and distorted by causes independent of the formative process, viz., by pressure, occasioned by the fœtus drawing the limbs into unnatural positions; by an improper situation of the fœtus in the uterus, or by certain ligaments becoming elongated, and the articulation distorted, from contraction of some of the muscles and relaxation of others.

3. That, whatever may have been the condition of the bones on the occurrence, the act of walking displaces and injures them.

Glisson and Camper ascribe varus chiefly to malformation, and even destruction (?) of the *astragalus*, and hence they pronounce it incurable; Blumenbach,* to an *unnatural shortness* of the neck of the same bone; Naumburg† and Wenzel,‡ to both *malformation* and *displacement;* Bruckner, to *partial dislocation* of the tarsus. The observations of the just-named authors refer, of course, *to old and advanced cases alone.*

Scarpa§ seems to have examined a younger subject with club-foot; for he observed only *slight deformity* of individual tarsal bones. The scaphoid, cuboid, and calcaneus were displaced; whereas the astragalus was *least affected*, and in *almost proper situation.*

W. Adams‖ has recorded the dissection of two cases of infantile varus, to the effect that there are but *immaterial changes* of the tarsal bones, and in this respect fully confirms the views of Dr. Little: "The deviation of the os calcis is next in extent to that of the navicular bone." In a sound foot, the round head of the astragalus is principally supported by the inferior scaphoid ligament. In severe varus, however, the anterior extremity of the os calcis is forced inwardly as far as the round head of the astragalus, and occasionally beyond it, taking the office of the calcaneo-scaphoid ligament; the posterior extremity of the os calcis is consequently directed outward, toward the fibula.

Dr. Little, in his lectures,¶ gives the following information of the skeleton of club-foot:—

"An examination of these drawings, Fig. 7, will illustrate the position of the tarsal bones in complete varus. The os calcis is drawn upward; the tibial articular facets of the astragalus and its round head are exposed upon the dorsum of the foot; but the scaphoid, cuboid, cuneiform, and metatarsal bones are not merely drawn toward the sole, but also inward and upward, (and sometimes backward;) so that the innermost point touches the internal malleolus, and has an articular facet formed on it, occasioned by contact and friction. The superior and external surface of the cuboid is somewhat separated from that of the os calcis;

---

*Geschichte und Beschreibung der Knochen. Göttingen, 1786.

†Abhandlung von der Beinkrümmung. Leipzig, 1796.

‡Dissertatio inaug. de talepedibus varis. Tubingen, 1798.

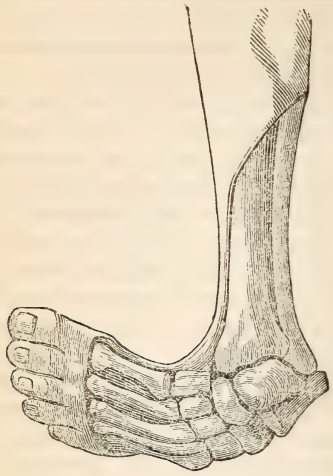
§Memoria chirurgica sui piedi torti congeniti dei fanciulli e sulla maniera, etc. Pavia, 1803.

‖Transactions of the Pathological Society. London, 1852.

¶On the Nature and Treatment of the Deformities of the Human Frame. London, Longman, 1853, and copied from Little.

whereas the plantar surfaces of these bones are turned toward each other, leaving a space between them externally."

Fig. 7.



And again, Little says:—

"An attentive study of anatomy, in talipes varus, will further confirm the opinion of its origin, *that the muscles are the parts primarily involved.* If the bones were simply arrested in their development, or if they had been injured by external causes, and the contraction of muscles were but secondary, the bones would not bear so precisely a relation to the action of the muscles inserted into them. The preparation from which the drawings are taken shows that the shortening of the gastrocnemius muscle corresponds to the elevation of the heel, while the adductor and the remaining muscles on the posterior and internal surfaces of the ankle have drawn the navicular, cuboid, cuneiform, and metatarsal bones upward and posteriorly away from the astragalus, exposing its round head. In fact, the conjoint powerful action of the gastrocnemius and the other has bent the foot at *the summit* of its tarsal arch, drawn its component parts asunder while the ligaments were yet soft."

The anatomical relations of the tarsal bones are delineated with much more plainness and accuracy by our esteemed friend Bernhard E. Brodhurst,* than by either of the preceding authors. Brodhurst says the os calcis occupies almost a *vertical position*, being drawn upward by the gastrocnemius muscle, and is also slightly *rotated outward.*

The astragalus follows the calcaneus, and is slightly rotated outward; it also undergoes displacement in its vertical axis; its inner surface tending to assume a direction forward and its external surface a direction backward, and by reason of its position between the malleoli, they are carried along with it, the internal malleolus being moved forward and the external backward. The superior articular surface of the bone is imperfectly covered by the tibia; indeed, it may remain entirely uncovered and be thrown forward on the dorsum of the foot. The astragalus being articulated with the os calcis, is slightly rotated together with it. It undergoes consequently a twofold displacement—*first, in its long axis*, through its attachments with the calcaneus; and *secondly, in its vertical axis.* The scaphoid bone is drawn in and upward, and its tubercle may be in contact with the internal malleolus. And the cuboid with the cuneiform bones, as well as the metatarsus and phalanges, necessarily follow in the abnormal direction.

With the anatomical observations of Brodhurst strictly accords not only the aspect of club-foot, but also the effect of the contracted muscles. A mere glance at the position of the heel in our specimen renders it evident that the posterior extremity of the calcaneus has *yielded inwardly* to the perverted action of the triceps, at the same time turning the bone slightly on its longitudinal axis, which the astragalus is forced to follow; whereas both Little and Adams erroneously state the direct reverse. It commonly happens that, if for some cause or the other, a muscle or its tendon is forced in an abnormal position, its action is thereby misdirected. Thus in club-foot, the adduction of the foot by the tibiales muscles displaces inwardly the insertion of the Achillis tendon, and the subsequent action of the triceps must necessarily tend to increase the adduction. On the other hand and in valgo equinus, the triceps muscle is converted into an abductor, co-operating with the peronei muscles. If either the tibialis posticus or peroneus longus and brevis leave their respective grooves behind the malleoli, they may eventually be turned into flexor muscles of the foot, instead of extending it. And once we observed the lateral displacement of the quadriceps femoris by distended subcruræan bursa, which caused that muscle both to bend and to knock-knee the extremity.

In as far as morbid anatomy may be relied on, the evidence seems to be conclusive, that in club-foot there is *no original malformation or defects* of the tarsal or metatarsal bones. From this well-established rule but a few exceptions have re-

* On the Nature and Treatment of Club-Foot. London: John Churchill, 1856.

cently been placed on record by Professor Th. Bilroth.

One case constituted pes varus of the highest grade of the right foot and pes varo-calcaneus of the left. The patient died from pneumonia, fourteen days after birth, when it was ascertained that the deformity of the right foot had been caused by the *absence of the entire tibia*, whereas the left presented the ordinary condition. In the right extremity the muscles of the inner side of the thigh inserted partly into the capsule of the knee-joint, partly into the aponeurosis of the leg, causing thereby permanent flexion of the knee. The patella presented an oblong form; there was no ligamentum patellæ. The capsule of the knee-joint was normal; the ligamentum laterale internum being absent. The fibula partook, with a dorsal surface, in the formation of the knee-joint, and was so loosely connected as to allow dislocation. In place of the cruciated ligaments there were but parallel folds of the synovial membranes.

The triceps muscle of the calf, tibialis posticus, and flexor digitorum communis longus considerably shortened. The flexor pollicis longus and tibialis anticus were entirely wanting. The tibialis posticus and flexor digitorum com. long. originated from the aponeurosis cruris, the rest in part from either the latter or the fibula, which was of ordinary size. Nerves and vessels normal in number and course.

The other case was observed in a female and well-grown child, nine months old. The left foot presented *defect of fourth toe, fifth metatarsal bone*, and *internal malleolus*, and had the malposition of valgus, the triceps muscle of the leg, and peroneus longus being contracted.

With the exception of these cases, we know no other similar defects of the bones of the leg and foot as the cause of malposition; and the most complete works on malformation, of Cruveilhier, Von Ammon, and Vrolik, are entirely silent on the subject. The only allusion we find in Robert is a case of Duval's, comprising a defect of the fibula.*

Having thus from post-mortem appearances conclusively ascertained the fact that, as a general thing, the contractions of muscles are the chief, if not the sole cause of talipes varus, it remains now for us to show which muscles are involved in the malposition.

* Des Vites Congénitaux de Conformation des Articulations, page 34.

First and foremost we have to mention the *triceps surœ*, (gastrocnemius, soleus, and plantaris,) which, through the Achillis tendon, have a common insertion in the tuberosity of the calcaneus.

At first sight it does not seem as if the triceps muscle was contracted at all. This comes from the rotation of the foot, by which the points of insertion of that muscle approximate each other. In order to show its full contraction, it would be necessary to reduce the rotation, which, of course, cannot be effected without first dividing the adductor muscles of the foot. This counterpoise seems to be the reason why the triceps muscle can never attain so great a retraction in varus as in equinus, for *the greater the extension of the foot, the less possibility exists of rotation, and vice versa.*

The idea has been prevalent among some surgeons, that the triceps was the chief, if not the exclusive cause of varus, and they have consequently contented themselves with dividing the Achillis tendon as a sufficient remedy.

This is, however, erroneous, both in a theoretical and clinical point of view. The movements of our own feet clearly denote the triceps extensor muscle as designed to raise the heel and to lower the toes. For this reason the Achillis tendon descends to the heel in a central position, equally distant from either malleolus. In club-foot, to a certain extent, the triceps is converted into an *adductor muscle;* that is to say, that after the Achillis tendon has been pulled more inward from its normal position in the axis of the leg, it cannot fail in assisting the prejudicial action of the tibialis muscles in adducting and rotating the foot. Club-foot, being dependent on abnormal pronation and extension of the foot, can, of course, not be completely overcome by the division of but one group of muscles. And gentlemen indulging in those erroneous views often experience some serious trouble with reference to the tuberosity of the fifth metatarsal bone, which, they say, becomes very painful. The secret resolves itself in the fact that the division of the Achillis tendon alone does not overcome the inward rotation of the foot, and does not diminish the tarso-metatarsal infraction, and that consequently the external margin of the foot still touches the ground at the said tuberosity, causing pressure and pain. The most conclusive disproval of the aforesaid error is talipes equinus itself. We leave it to those surgeons to conciliate their

views with that pathological and rather stubborn fact.

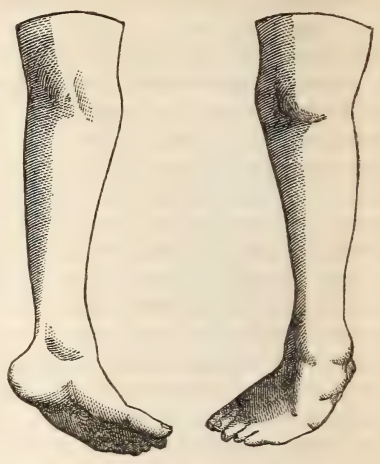
Next to the triceps, the *two tibiales muscles* are implicated in this deformity. The tibialis posticus is sometimes so much contracted as to be forced out of its groove from behind the internal malleolus, and to appear outside or even in front of the latter, becoming actually, therefore, a flexor muscle of the foot. The tibialis anticus is generally the tenser adductor; the displacement of its tendon is noticed toward the front of the foot. The shortening of both or either of the tibiales muscles is *the cause of the rotation of the foot.* If their contraction is not the same in amount, the shorter tibialis will so much obscure the longer as to make its implication dubious. But as soon as the former has been divided, the contraction of the other becomes at once apparent. At last most of the plantar muscles are contracted; their shortening accounts for the longitudinal contraction of the foot and the increase of the plantar arch. We scarcely need specify them, inasmuch as most of them constitute one bundle, with the plantar aponeurosis.

The inversion of the toes in club-foot does not exclusively depend on the malposition of the foot in the tibio-tarsal articulation, nor on the infraction of the same, but conjointly on the two, and on *the rotatory looseness of the knee-joint allowing the tibia to turn on its axis.* That this is *a fact*, you can readily ascertain by taking a firm grasp of the thigh and foot and turning the articular faces of the knee-joint upon each other. That *relaxed condition of the knee-joint* generally continues for a long while, and even beyond the actual treatment and amendment of the deformity, so that the patient may still invert his toes with his well-formed foot. It requires, therefore, our special attention, lest we might risk the return of the original difficulty.

Another inconvenience may result from the undue mobility of the knee, namely, *posterior inflexion* of the knee-joint. In ordinary varus this does not often occur, whereas it is more frequent in the lower grades of equino-varus, in which the extension of the foot exceeds the rotation. The patient resorts to posterior inflexion as an *expedient* to approximate the points of insertion of the triceps, and to bring the heel to the ground.

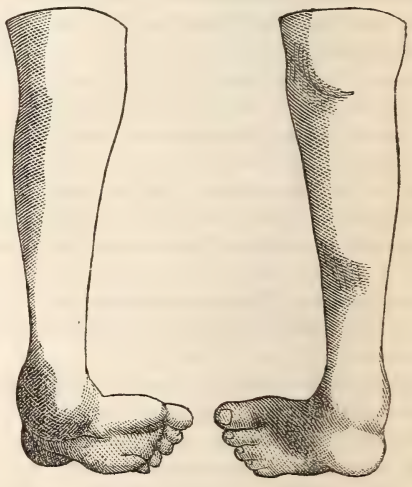
The four specimens of talipes varus which we now exhibit illustrate different grades of the deformity. The one of a child, but a few months old, shows the least; the next, that of a boy seven years of age, Figs. 8 and 9, is essentially

Fig. 9. Fig. 8.



equino-varus—that is to say, extension of the foot prevails, presenting but a moderate deformity although it has served for locomotion all the time, and confirming, therefore, the axiom we have tried to inculcate, that the greater the extension, the lesser the rotation of the foot; the third, the most *complete varo-equinus* (Figs. 10 and 11) you ever can meet, is derived from a girl

Fig. 10. Fig. 11.



twelve years old; and the last, Figs. 5 and 6, as already stated, belongs to a man who was twenty-seven years old when he came under our

charge. The last we almost completely relieved, whereas Fig. 10 received but little benefit at our hands, it being the most obstinate case we ever took charge of, from the fact that the bones had become greatly changed in their respective forms.

We deem it, for the practical objects of our lectures, entirely unnecessary to qualify different degrees of talipes varus, or lose any time with the mixed forms. In knowing the fundamental forms, you cannot fail to discern their complications.

The specimen upon the table will also enable you to form an idea as to the *awkward gait* of persons thus afflicted, and by bearing in mind that the deformity is still more aggravated by the *unequal length* of the extremity, you will realize the serious impediment in both appearance and locomotion of the patient. The preceding remark does not, of course, apply to double club-foot, in which the length of both extremities is mostly the same, and in which the walk is differently impeded.

As to the *usual causes* of club-foot we have *no positive knowledge*. Of the 1218 cases of talipes enumerated by Lonsdale,* 688 were congenital varus. That figure informs us first of *the frequency of talipes varus*, being more than 50 per cent. of all deformities of the feet; and secondly, of their *congenital origin*. But what the cause of congenital varus actually is, we do not know. Some authors have indulged in the speculation that the position of the fœtus in utero is not unlikely the prominent source of club-foot.

It seems hardly necessary to refute that hypothesis of Cruveilhier, as its fallacy is almost self-evident. The uterus is, for the average fœtus of six and a half pounds in weight, a rather limited space, and it has therefore to accommodate its form to the uterine cavity, the limbs being drawn up to the body and the plantar surfaces turned toward each other. This position the fœtus maintains even for some time after birth. If that was a sufficient cause for club-foot, almost every child would exhibit it; in fact, since the uterine position is a common one, varus should be the normal form of the foot.

The statistical tables of Duval, if, indeed, they are at all necessary in aiding our daily observations to the contrary, prove that but one club-foot occurs in a population of 3000 in France.* Certainly this does not speak in favor of Cruveilhier's theory. Moreover, the lower extremities in general participate in the crooked position of the fœtus in utero, without their becoming deformed. And, in fine, the anatomical conditions in club-foot demonstrate that the bones are not acted on by the uterus; and upon the muscles it can scarcely be presumed to have any lasting influence. We can well comprehend that the position of the fœtus may for a short time prevail, but that would not be termed club-foot, since by mere manipulation we succeed in correcting it.

Delpech traces club-foot to arrest of development, and he endeavors to render his suggestion plausible by referring to an incidental coexistence of club-hand, hare-lip, cleft-palate, and other defects, with club-foot. But the anatomical condition of the latter is the best answer to such untenable speculations.

After mature deliberation, we have come to the conclusion that the cause, in congenital as well as in acquired club-foot, is pre-eminently defective innervation, and there is truly no reason why derangements in the nervous system should not take place in the fœtus as well as in a newly-born child. In club-foot the tibial nerve is the bearer of the difficulty, as must be inferred from the experiments of Bonnet.

The acquired instances of club-foot are comparatively rare, and they depend most unquestionably on impediments and lesions of the spinal cord. We can discriminate two forms of acquired varus. The active form is the less frequent, consisting in reflex action in both extensors and adductors. The extensors most usually preponderate, and we see therefore equino-varus. And the passive form as a sequel of motor paralysis.

The general experience on club-foot, etc. has settled the previous doubts. It is now generally admitted that all forms of varus are caused by either muscular contraction or motor paralysis, and that the individual bones of the foot yield only so much in their respective positions as they are forced to do by the abnormal muscular traction and the superincumbent weight of the body. But being held for some time and acted upon in that preternatural position, they gradually mould themselves accordingly, and become consequently

* Medical Gazette. London, 1849.

* Traité Pratique de Pied. Bot., 1834.

malformed. That this is less the case in the lower grades of malposition of this kind and more in aggravated deformities of the foot, must be self-evident, and requires no further proof.

The prognosis of club-foot is governed by the same general considerations as that of talipes equinus. It should, however, be remembered that in the latter we have rarely to contend with any malformation of the bones. At any rate, the local obstacles to reformation and reposition of the foot are of a simpler nature. The same holds good also in recent cases of varus, in which the prognosis is comparatively favorable. But the higher grades of club-foot already used for locomotion are certainly severe tests for the patience, endurance, and perseverance of both the surgeon and his client; and years may be required to achieve a moderately good form and position of the foot, while the attenuation and impeded growth of the extremity may even remain in *statu quo*.

The age of the patient is thus far of prognostic importance, as it implies both previous locomotion of the distorted extremity and increasing hardness of the bones. We have, however, observed some exceptions to that rule, and found some of the specimens of varus of more advanced age more manageable than in younger individuals, the grades being the same.

In general, however, talipes varus constitutes a formidable and variously complicated deformity, and its eventual relief an object of skill and tact of the surgeon. We have purposely emphasized this remark in order to counterbalance the still-prevailing opinion of some practitioners, that club-foot was a distortion readily overcome by dividing the Achillis tendon and applying Scarpa's shoe. The want of experience qualifies such an assertion, and we have good reason to believe that in so comfortable a way not one single club-foot has ever been cured.

Whenever a case of talipes varus is placed under your charge, we should advise you to weigh carefully in your mind all its constituting difficulties: its degree, the condition of the bones, the state of the extremity in general, the age of the patient, and the determination of the latter or the relatives to have the cure accomplished; for their good-will is certainly indispensable to the ultimate result. And according to all this, shape your prognosis. In doing so, you will protect yourself against insolence and disappointment.

COMMUNICATIONS.

A Historical Sketch of the Dance of St. Vitus, with Notices of some Kindred Disorders.

By James J. Levick, M.D.,
One of the Physicians of the Pennsylvania Hospital.

Continued from page 282.

More recently, (1760,) a religious sect, known as the "Jumpers," who appear to have been of the Methodist persuasion, excited much enthusiasm in Great Britain. At their religious meetings they succeeded in creating a state of nervous excitement which resulted in great disorder.

The leading character, we are told by a recent writer, "was the convulsive tendency of all the voluntary muscles, and a state of religious frenzy which impelled them to jump, to make frightful gestures, to utter shrieks and groans, which might be taken for demoniacal ravings."* This jumping was continued for many hours at a time. Four thousand people were within a very short time affected with this convulsive malady. The arguments adduced to justify this strange form of worship were that "David danced before the ark, that the babe leaped in the womb of Elizabeth, and that the man whose lameness was removed leaped and praised God for the mercy which he had received." Twenty years before this time, (1742,) a somewhat similar state of things was witnessed in the church of Mr. McCulloch, in the parish of Cambuslang, in Lanarkshire, Scotland, in which, during a state of much religious enthusiasm, a whole congregation was seized with violent excitement, evinced by shouting, by violent agitations of the body, clapping of the hands, beating of the breasts, by shakings and by trembling, by faintings and convulsions. Such was the enthusiasm created by this state of things, that 30,000 people assembled on one occasion to witness and participate in it. This lasted for six months, but, as was to be expected, such an excessive zeal soon consumed itself, and the good pastor had to bewail the subsequent wanderings of his flock.†

Our own country and our own age have not been exempt from strange nervous disorders closely allied to the dance of St. Vitus. In the library of the Pennsylvania Hospital may be

* Madden, op. cit.

† On some convulsive diseases common in Scotland. Edinb. Med. and Surg. Journal, vol. iii. p. 437, A.D. 1807.

found the original thesis of Dr. Felix Robertson, of Tennessee, long since a distinguished physician of that State. This essay was published in 1803, and was designed to give a history of the Epidemic Chorea then prevailing in the States of Kentucky, Tennessee, and Virginia. After referring to the blaze of religious enthusiasm which burst forth in the Western country about the year 1800, and which traveled like electricity so that it was felt almost instantaneously in every part of Tennessee and Kentucky, the author describes a series of remarkable convulsive involuntary movements which affected large numbers of those who had congregated together for worship. He says "the outward expression of their worship consisted chiefly in alternate crying, laughing, singing, and shouting, and at the same time performing that great variety of gesticulation of which the muscular system is capable." After a time a loss of control took place, and these enthusiasts "continued to act from *necessity* the curious character which they had begun from *choice*." This soon extended to the spectators, and in a little while spread over every part of Tennessee, Kentucky, and various parts of Virginia. It is said that the muscles chiefly affected were those of the trunk, particularly those of the neck, sometimes those of the superior extremities, rarely those of the inferior. The contractions were sudden and violent, and sometimes so powerful that the patient was thrown to the ground, where his motions were like those of a live fish thrown on land.

An account of a less violent but equally characteristic form of the same epidemic is given by the famous itinerant preacher Lorenzo Dow, in his Journal, published in Philadelphia, 1815.*

Phenomena not unlike those just described may even now be witnessed in the so-called camp meetings in different parts of our country. I have myself seen a whole congregation in a state bordering on ecstacy, swaying to and fro, shouting, groaning, leaping up and down in a manner not unworthy of the votaries of St. Vitus. What with exhibitions of this kind, and the extent to which the absurdities of the "spirit rappers" obtain among us, I fear we of the nineteenth century cannot plume ourselves on having escaped altogether, practices as unmeaning as those of the dancers around the fires of St. John in the fourteenth century.*

The history of convent life, in the fifteenth, sixteenth, and seventeenth centuries, abounds in the records of delusions, often ending in violent convulsive movements affecting their inmates. Beginning with a single individual, these soon were propagated by sympathy to great numbers of their associates. Such was the case in the Convent of Yvertet, in the territory of Liege, in 1550, the members of which were seized with a nervous malady attended with convulsive spasms of the trunk and limbs, with leaping and jumping in the most remarkable manner. Numerous analogous cases might be adduced. In most of these cases the cause of the malady was referred to the malefic influence of some demon, and the unfortunate subjects were condemned to a cruel death as witches, or as in league with the evil one. A similar fate is recorded in the Medico-Chirurgical Transactions, vol. v. p. 20, et seq. A girl named Christian Shaw, aged eleven years, had violent fits of leaping, dancing, running, crying, fainting, etc. These fits continued from August, 1696, to the end of March in the year following, when the patient recovered. The whole being ascribed to witchcraft, we find it on record that by the deliberate verdict of a jury, three men and four women were condemned to the flames, and were burnt at Paisley, June 10, 1697.

Apart from religious frenzy, cases of analogous character are reported. Thus, in a paper

* Madden (op. cit.) quotes this Journal as follows:—

"I had heard about a singularity called *the jerks* or jerking exercise, which appeared first at Knoxville in August, 1804. * * * * I began to speak to a vast audience and I observed about thirty to have *the jerks*, though they strove to keep still as they could; these emotions were involuntary and irresistible. At the house of a Nicholite, I observed his daughter to drop the teacup in great agitation, she having the jerks. After meeting I rode eighteen miles to hold a meeting at night; the people of the settlement were chiefly Quakers, and they had said (so I was informed) that the Methodists and Presbyterians have the jerks because they sing and pray so much, but we do not have them; however, about twenty of them came to the meeting to hear one, as they said, somewhat in the Quaker line, but their usual stillness and silence were interrupted, for about a dozen of them had the jerks as keen and as powerful as any I had seen, so as to have occasioned a kind of grunt or groan when they would jerk. It appears," adds the preacher, "that they undervalued the great revival, attempting to account for it on natural principles, therefore it seems to me that (from the best judgment I can form) God hath seen proper to take this method to convince the people that He will work in a way to show his power, and sent *the jerks* as a sign of the times, partly in judgment for the people's unbelief, and yet as in mercy to convict people of divine realities. I have seen Presbyterians, Methodists, Quakers, Baptists, Church of England, Independents, exercised with *the jerks*."

* The peculiar mode of worship of the "Shakers" would seem to have been derived from that of some of the sects we have described.

before alluded to, an account is given of the "Leaping Ague," as it was called, from the fact that those affected with it—

"During the paroxysm, have all the appearance of madness, distorting their bodies in various ways, and leaping and springing in a surprising manner, mingled with convulsive fits of dancing. Sometimes they run with astonishing velocity, and often over very dangerous passes to some places out of doors, which they have fixed on in their own minds, or, perhaps, even mentioned to those in company with them, and then drop down quite exhausted. At other times, especially when confined to the house, they climb in the most singular manner. In cottages, for example, they leap from the floor to what is called the baulks, or those beams by which rafters are joined together, springing from one to another with the agility of a cat, or whirling round one of them with the motion resembling the fly of a jack. Cold bathing is found to be the most effectual remedy; but when the fit of dancing, leaping, or running comes on, nothing tends so much to abate the violence of the disease as allowing them free scope to exercise themselves until nature is exhausted. In some families it seems hereditary, and I have heard of one in which a horse was always kept ready saddled, to follow the young ladies belonging to it when they were seized with a fit of running."*

In some cases it is said that the clattering of the tongs, or any similar noise, will bring on a fit. A somewhat analogous history is given by Mr. John Crichton, in the *Edinb. Medical and Surgical Journal* for 1829, p. 299, et seq.†

One of the most remarkables cases of dancing mania of modern times affecting a single individual, is that recorded in the Medico-Chirurgical Transactions, vol. vii. p. 237, by Mr. Kinder Wood. The account is much too long to quote in full; the principal facts are that the patient, a young married woman, after having suffered from various premonitory symptoms, was seized with the most extraordinary involuntary movements. She was hurled from side to side of the couch-chair upon which she sat, was sometimes instantaneously thrown upon her feet, when she jumped and stamped violently. At times she was impelled forcibly into every corner of the room, and began to strike the ceiling, the furniture, and doors violently, the sound of which afforded her great satisfaction. She frequently danced on one leg, holding the other with her hand, and occasionally changing legs. Later, the movements assumed the regularity of a measured step, and the vivacity of the country dance. A drum and fife being obtained, the air to which she had danced being recognized, known as the "Protestant Boys," was played, to which she danced continuously until she missed the step, when her involuntary movements instantly ceased. This was repeated for some time, until it was positively ascertained that the movements could be checked by causing her to miss the step. In this way, by using two or more drums, the paroxysms were prevented, and eventually entirely checked. An interesting fact is mentioned which may be referred to as having some bearing on the pathology of chorea, that on the day of her convalescence an eruption appeared on her body, of a bright-red color, in patches, lasting three days.

It may, with great show of reason, be contended that the chorea of the present day is a disorder very unlike the dance of St. Vitus or the various convulsive movements which have been referred to. That there is mixed up with these involuntary movements much that is assumed; that hysteria, and perhaps temporary insanity, have often been associated with choreic movements, cannot be denied. These nervous diseases form a chain of great extent, whose distant links would seem to have but little in common; yet the careful investigator, while analyzing these compound disorders, will find the same elementary constituents in all, and may readily trace a regular gradation between the involuntary dances of the fourteenth and the involuntary jerks of the nineteenth century, between which and ordinary chorea the resemblance is of the closest kind. These gradations in disease cannot fail to remind one of similar gradations in natural science, as noticed in the different degrees of development in the highest and lowest of the vertebrata.*

* Ed. Med. and Surg. Journal. vol. iii. p. 434.

† Not to extend too much this paper, I shall content myself with quoting this remarkable case in a note. It was that of a girl, aged fifteen, who, having been frightened by thieves, became pensive and feeble, had attacks of shaking. At ten o'clock of each morning, she would hide all her trinkets, converse with her family, commencing her sentences with the last word, or pronouncing the words with the last letter foremost, or would write with great rapidity, beginning at the right edge and writing backward the last letter of the word first. These strange vagaries would continue from 10 o'clock until 1 P.M. At 1 o'clock she would begin to dance, jumping over tables, chairs, run round and round the edge of a table, then spring up, and squatting herself upon the top of the room door swinging backward and forward, occasionally leaping over stairways without injury. This condition would last an hour longer. At 2 o'clock she would fall into a deep sleep, and sleep three hours, and awakening would remain in a sound mind until next day at 10 o'clock, when the same round of performances would be repeated.

* Hecker devotes a chapter to another form of the dancing

The convulsive disorders occurring in convents which have been referred to, were, in many instances, associated with a belief by the subjects of them that they were transformed into the lower animals. Thus, in the convent at Cambrai, in 1494, a whole community of nuns believed themselves transformed into animals, running about sometimes like dogs, at other times like cats, counterfeiting their motions and their cries; fancying themselves changed into birds, and then striking out in the air with extended arms, as if about to soar into the heavens. In the Convent of St. Briget, in Flanders, about the year 1560, many of the inmates rushed about, uttering horrid sounds and noises like the bleating of sheep. In a convent near Paris, the members were attacked every day about the same hour, with an unconquerable propensity to imitate the mewing of cats, and were only cured by a file of soldiers posted at the gate of the convent with orders to charge on them on a repetition of their noises.

Under the varied names of *zoomania lycanthropia, lupus insania, lycaon, cynanthropia,* this strange belief in a transformation of men into the lower animals appears to have been recognized among all nations and in almost all ages. As the most remote in its phenomena from those of St. Vitus's dance, it may properly close this paper, already much extended beyond its intended limits.

In profane history we have allusions to such transformations in the metamorphoses of Ovid; in sacred history, in the account of that Judean king "who eat grass like the ox." One of the oldest authorities in our own language, quoted on this subject by all modern writers, is Burton, who, in his *Anatomy of Melancholy,** quotes largely from Aetius, Paulus Ægineta, Donat ab Altomari, Wierus, Forestus, and others, in describing *Lycanthropia,* or *Wolf Madness.*

Having access through the hospital library to the old Latin editions of the Fathers, the writer of this paper, though not wishing to be thought pedantic, has carefully consulted the authorities thus referred to. The results of this research add but little to the summary given by old Burton, and which is inserted below.†

Aetius,‡ who is one of the oldest writers on this subject and the most largely quoted, refers to still earlier notices of it. He states that the disorder prevails most in the month of February, and refers the ulcers on the legs to constant bruises and the bites of dogs. Not only is the tongue dry of those affected, but they do not spit

---

mania, which is said even now to exist in Abyssinia, and is called *Tigrètier.* He quotes largely from the narrative of Nathaniel Pearce, who lived in Abyssinia for nearly ten years, and whose own wife is said to have suffered from it. The chief points of interest in connection with it are, that beginning as a violent fever it turns to a lingering sickness, from which the patient can only be cured by the hiring, on the part of the relatives, of a band of trumpeters, drummers, and fifers, under the influence of whose music the invalid, though perhaps reduced to nearly a skeleton, gradually begins to move, and after a time to dance violently, after which, and the performance of certain religious ceremonies, she is restored to health. The notice of this malady has been omitted from the text, from the fact that though Pearce is very positive in his statements, yet in a late number of *Archives Générales* I find the existence of Tigrètier, as a disease, entirely denied by a recent writer from Abyssinia.

Still another somewhat analogous disorder is incidentally alluded to by Sprengel, in his History of Medicine, under the name of *Beriberi,* which, he says, exists among the Hindoos, and is the analogue of the dance of St. Guy. Good, in his "Study of Medicine," devotes a chapter to *Beriberi,* to which the reader is referred.

---

* The Anatomy of Melancholy. By Democritus Junior. 11th edition. 2 vols. London, 1813. page 13. [Mem. 1. Subs. 4.]

† "*Lycanthropia,* which Avicenna calls *cucubuth,* others *lupinam insaniam,* or wolf madness, when men run howling about graves and fields in the night, and will not be persuaded but that they are wolves, or some some such beasts. Aetius and Paulus call it a kind of *melancholy,* but I should rather refer it to *madness,* as most do. Some make a doubt of it, whether there be any such disease. *Donat ab Altomari* (cap. 9, Art. Med.) saith that he saw two of them in his time. *Wierus* (De Praestig Demonum, cap. 21, 1, 3,) tells a story of such a one at Padua, 1541, that would not believe to the contrary, but that he was a wolf. He hath another instance, of a Spaniard who thought himself a bear. *Forestus* (Obs., lib. 10, de Morbis Cerebri, cap. 15,) confirms as much by many examples; one, among the rest, of which he was an eye-witness at Alcmaer in Holland. A poor husbandman that still hunted about graves, and kept in churchyards, of a pale, black, ugly, and fearful look. Such belike, or little better, were King Proetus's daughters, (*Hippocrates, lib de insania,*) that thought themselves kine; and Nebuchadnezzar in Daniel, as some interpreters hold, was only troubled with this kind of madness. This disease, perhaps, gave occasion to that bold assertion of Pliny, (lib. 8, cap. 22,) that *some men were turned into wolves in his time, and from wolves to men again;* and to that fable of Pausanias, of a man that was ten years a wolf, and afterwards turned to his former shape; to Ovid's tale of Lycaon, etc." Other references are given, and it is said of the lycanthropes, that they lie hid most part all day, and go abroad in the night, barking, howling at graves and deserts; they *have usually hollow eyes, scabbed legs and thighs, are very dry, and pale.*

In Babbington's translation of Hecker, in which also this extract may be found, it is stated that Oribasius, who flourished 140 years before Aetius, was the first author in whom mention is made of lycanthropia. Burton might have added to the notice of Nebuchadnezzar that of the poor man whose history is recorded, Luke, viii. 27: "which had devils long time, and wore no clothes, neither abode in any house, but in the tombs."

‡ Ætii medici Graeci contractae ex veteribus medicinæ tetrabiblos; interpete Jan Cornario, 1567 Ext. in Art. Med. Princiip Tetr. 2, Sermo 2, p. 254.

at all, and are very thirsty. Paulus Ægineta* quotes Aetius almost word for word. Avicenna† states that the lycanthropes are never quiet in one place, that their faces are jaundiced; he says the Arabians called the disorder *Chatrab*. Paulus knew an instance in which the subject of it spent the night among the tombs, but during the day attended rightly to his duties, not avoiding company. Schenckius‡ has a chapter *de Lycanthropia*, p. 147, and speaks of it as a species of melancholy, quoting Aetius and the others before referred to. He records the case of a shepherd who thought himself a wolf, and who leaped on and killed many lambs in the field. When captured, after much difficulty, he declared himself to be a wolf *with the hair on the inside of his skin*. To decide this matter some unfeeling person cut (*amputavit*) his legs and his arms, but finding him an innocent man he delivered him to the surgeons, but he died in a few days. Forestus§ tells of another who, having entered a church, when excited by rage leaped over the stools up and down, and was never quiet in one place.

The treatment of lycanthropia advised by Aetius, and which seems to have been adopted by the others before quoted, was, in the beginning of the attack to open a vein and draw blood, "*ad deliquum animi*," and to nourish the man with the juice of good food.

"He should also use sweet baths, and for three days after, the whey of milk. After this he should be purged with the hiera from colocynth, or other good purge, taking it again and again. After the purgations, the theriaca of vipers should be used, and other things which before have been mentioned for the cure of melancholy, should be exhibited. At night, when the disease is fully formed, irrigations to the head likely to induce sleep should be used, the nostrils also should be smeared with opium and such-like essences, and at the same time, somnifics in drink should be administered."

Avicenna goes further, and recommends that when the medicine and the cure do not keep hand in hand, that the patient's head and face should be struck so that he may feel pain, and that his sinciput should be cauterized.

Madden (cit. supra) draws largely from various authors on this subject; he gives a chapter from St. Augustine's *De Civitate Dei*, "on the incredible transformations which Varro believes in;" in which, among other mythological curiosities, the transformation of the companions of Ulysses into beasts, and of the Arcadians into wolves, are referred to. Quoting *William of Malmesbury*, he gives the account of two old women living on the road to Rome, who kept an inn, and possessed the power of converting a traveler into a horse, a pig, or an ass, which, when a guest came alone, they did, to their own great gain, as they sold the same to dealers for a good price. One young man they changed into an ass, making much money of him, who, by a miracle, was thus destined for the use of travelers.

"He did not, however, lose his understanding, but his speech," [the reverse of what we generally see in young men who have undergone such transformations now-a-days,] "hence, the old women derived great advantage from the use made of him; which, being known, a neighbor bought the ass at a large price; he was cautioned, however, by the women, that he should keep the ass from going to water. For a long time he was kept without water, but at length, the keeper having relaxed in care, the ass betook himself to a lake and there rolling for some time, he (the young man) was restored to his proper form."

Absurd as it seems even to quote this story, it yet claimed the serious consideration of the sovereign pontiff, Pope Leo.

Our author also gives us the following account of the *wehr-wolves* of Germany, who would seem to have retained their ruling passion in their new shape, or at least to have had some method in their madness.

"Olaus Magnus revels in accounts of men converted into wolves. He states that on a certain Christmas night a troop of wehr-wolves congregated in a certain district, and caused the greatest terror and detriment to the inhabitants. They broke into houses in the dead of the night, descended into beer cellars, guzzled and emptied the casks into the middle of the cellar, and played the most brutal antics. And it hath been constantly affirmed, that among this multitude of wehr-wolves which ravage the northern regions, there are many magnates of this world, and men of the first nobility."

Equally absurd stories are told by Camden in his "*Britannia*," quoted as above, where, in the Annals of Ireland, under date 1341, he has the following:—

"*Item.* This wondrous prodigie following, and such as in our age had not been heard of before,

* Pauli Æginetæ de re medica libri septem, (op. cit.) Lib. 3. p. 426.

† Avicennæ principis et philosophii sapientissimi. Libri in re medica qui hactenus ad nos pervenere. Venetiis, 1563. Lib. 3, Tract 4, p. 478.

‡ Schenckii Observationes Medicarum Rararum, etc. Francofurti, 16[illegible]9.

§ Domini Petri Foresti, M.D., Observationum et curationum medicinalium ac Chirurgicorum opera omnia. Francofurti, 1634. Lib. x. Ob. 2 S., p. 348.

happened in the county of Leicester, when a certain waifaring man, as he travelled in the king's highway, found a paire of gloves fit, as he thought, for his own turne, which, as he drew upon his hands, forthwith instead of a man's voice and speech, he kept a strange and marvaillous barking, like unto a dogge; and from that present, the elder folke and full growen, yea, and women too, throughout the same country, barked like big dogges, but the children and little ones waughed as small whelpes. The plague continued with some, eighteen days, with others, a whole moneth, and with some for two yeares."

These fanciful stories have been recorded in this place to show the great extent to which a belief in these transformations seems to have obtained among men of different nations and in all ages. To come back from the airy regions of witchcraft and of the imagination to the sober domain of truth, we have an interesting account, by Dr. Willis, of a family which he attended, in which five children suffered from a convulsive disorder, accompanied with very singular symptoms; all the patients barked, or rather howled, like dogs, so that they could be heard at some distance from the house. These, evidently, were cases of hysteria, of which we have other similar cases recorded. Madden closes his interesting chapter on Lycanthropy with copious extracts from Boguet's work, "*Sorcellerie des Lycanthropes ou Loups Garoux*," from which we learn that numbers of persons were burned in the sixteenth century, either as themselves "Loups garoux" or as causing such a condition in others. The whole chapter is an interesting one, and almost unique in its character.

On a final review of our subject, it is sad to discover that, with perhaps the exception of Lycanthropia, all or nearly all the morbid mental phenomena which we have considered have been associated with excessive zeal on the part of Christian worshipers, and by psychological nosologists have been grouped together as illustrations of religious mania. If the word religion be used in its strict etymological sense, it may perhaps be correct, but if in the ordinary acceptation of the term, such a classification is incorrect in its phraseology and unjust to the holy faith we profess. No mode of life which, under the plea of religion, sets at defiance the laws of our physical being, which prevents the healthful play of our intellectual and social feelings, whether it be in the unnatural solitude of the convent, or the stern asceticism of domestic life, can produce a sound and healthful religious growth, or the results of such a life be justly quoted as the natural fruits of that religion whose highest aim, next to the glory of God, is to promote the well-being of mankind, and whose ways, we have the highest authority for believing, are ways of pleasantness, as her paths are peace.

We have seen the melancholy results of such a disregard of physical laws in the mad practices of the Flagellants, in the convents of Cambrai and Briget, in the inhuman practices of the Anabaptists, in the absurdities of the Convulsionnaires of Jansenius and the Jerkers of our own land.

These results are peculiar to no one sect or age, but must occur whenever the larger or the smaller wheels of the complex machinery of life, which, by nature, work together in such beautiful and divine harmony, are moved in disregard or in defiance one of the other.

We may, perhaps, be told that the Christian is enjoined by the Author of his faith "to mortify the flesh;" but have we authority for believing that by this more is meant than a healthful restraint upon uncurbed propensities and unbridled passions, the indulgence in which, while jeoparding the safety of the immortal soul, cannot fail sooner or later to ruin that fearful and wonderful mechanism—the human body?

Every physician in his practice must have witnessed the baleful effects of such sensual indulgence as that we have last referred to, the gratification of the physical man to the entire neglect of the psychical. Are there not many who, like the writer, too frequently have seen the sad consequences of a mistaken austerity of faith, which by ignoring the requirements of the body—exercise, cheerful recreations, amusements, the genial company of friends—has been followed by a morbid condition which has tinged with its own dark hue all the religious views of its victim; substituting for the cheering hopes of the Gospel the gloomy and fearful anticipations of a distempered imagination? It is to a condition such as this, as has already been remarked, that we owe the repulsive practices which we have described, when men mistook the cravings of a diseased body for the promptings of an enlightened soul—no more striking illustration of which could be afforded us than by the sect so aptly described as penitent fanatics and "*atrabiliares*."*

* Vide "Histoire des Egaremens de l'Esprit Humain." (Cit. supra.)

A poet of our own language has thus tersely described this morbid state:—

"Men think they're *pious*
When they're only *bilious*."

We build large hospitals for those whose reason has been dethroned; we supply these infirmaries with every restorative that medical skill or inventive genius can suggest. Their halls are hung with pictures to tempt and gladden the eye; the cheering strains of music greet the invalid's waking hours or soothe him to sleep, when weary of the day; riding, driving, games, amusements of various kinds are offered to divert him from the contemplation of himself and his infirmity; healthful and diversified food for body and mind is supplied him, until with a restoration of his physical health, reason resumes her throne. May we not from all this learn the lesson, that as it is better surgery to save a limb than to amputate it, so it is far nobler to save a mind, by bracing its timbers and furnishing it with proper and diversified supplies, than to rebuild by the very same means its shattered and unsightly wreck?

In thus doing, we shall often find that the most healthful moral development will be found in the highest physical condition; and must we not believe that that worship will be especially grateful to the Author of our being which proceeds from a sound mind in a sound body?

Believing as he does that there are seasons in the life of every one when amusements for body and for mind are positively necessary, and using the terms music and dancing as generic terms for such healthful recreations, the writer is quite prepared to apply the words of good old Baglivi, when describing the *Tarantismus* of his time, to that idiopathic tarantismus, if the term may be permitted, of the existence of which in our day we are all painfully conscious.

"If the Patient happens to lose the Season of Dancing, then he will be under very grievous Symptoms all that Year; such as a jaundice color in his Skin, sickness at heart, want of Appetite, a Slight Fever, and the rest of them which we have already mentioned over and over. Further, if he eats any Weather Mutton, Cucumbers or Citruls he is presently seiz'd with a grievous Pain in the Stomach. But then if he makes use every Year of the Season for Dancing, and by Sweating and the Sound of Music throw out the Seeds of the Poyson he holds very well all that Year, and is not liable to any of the forementioned Symptoms."

Palatine Defects and Their Treatment.

By James E. Garretson, M.D.,
Of Philadelphia.

Diseases of the Mouth—*Continued.*

In the treatment of any palatine defect, the first consideration is to be of its cause and condition. Thus it will be found that such defects or deficiencies may, by influencing circumstances, require treatment so modified or changed as to seem, in cases apparently similar, quite at variance with each other.

For example, let us take two perforations exposing the nares; one congenital, the other the result of disease. Now in the first of these cases we might adopt any operation or appliance which would seem to promise relief; while in the second we might justly pause at any interference. No one in his senses would attempt the operation of staphyloraphy on a patient laboring under acute syphilis, or where a mercurial course had so broken down the crasis of the blood as to make union by the first intention impossible, or even doubtful. No more would he be justified in attempting this or any other of the operations of expediency, with the constitutional conditions adverse to success, than he would be justified in avoiding the responsibility where such influencing conditions were favorable.

Constitutional associations are first, therefore, to be inquired into and considered. In this direction, of course, I can have nothing to suggest. The practitioner who attempts surgery is presumed to have all required familiarity with the great principles of practice.

The condition known as cleft palate, to which we at once pass, may, from its exceeding frequency, be the first to claim our attention. A cleft palate may be partial or complete, that is, there may be a simple lengthwise division in that portion of the mouth known as the soft palate, or the cleft may be so extensive as to extend from the uvula to the lip, a fissure separating both hard and soft parts existing. The first of these two conditions is found perhaps most frequently as the result of disease, the latter is nearly always congenital. Indeed I do not recall a single case where I have met complete fissure as the result of disease. I have treated fissures produced by syphilis where there was the break both in the bone and in the soft palate, but never that I remember where a coexistent break existed in the continuity of the lip.

Fissure of the hard palate, the result of disease, differs, however, from congenital fissure in a particular which I think would scarcely allow of the surgeon being deceived. A fissure the result of disease exhibits a break in the continuity of one or both palatine bones; a fissure having congenital origin exhibits, so far as my experience goes, the deficiency at the line of contiguity or in the palatine raphé—this at least as the rule.

Let us first consider the condition and treatment of the congenital cleft. A child is born, toward whose mouth attention is first directed either by the nasal character of its cry, or a little later, by its inability to take the breast properly, or, what is by great odds much the most frequent case, the condition is marked by the break continuing through the lip, giving the deformity known as hare-lip.

When a child is thus unfortunately born, and the attention of the surgeon is called to the case, it seems to me there is but a single question presents itself for his consideration, namely, how the deformity may be corrected; suffered to exist, every day will increase the difficulty of the cure, that is, as the most formidable part of the operation is involved, while if at once attempted, the prospect of complete success is very great.

Fissure of the hard palate has generally been deemed irremediable, as far as operative means are concerned, and the surgeon has learned to consider his whole duty done in describing to the parents the method which in after-life is to conceal and correct the trouble of his patient. Now in this paper I shall present a remedial surgery which is as practicable and feasible as any other of the operations of expediency, and perhaps I am justified from experience in going so much farther as to say that the modes of procedure will be found much more promising than the majority of such operations. Through the proper application of mechanical, allied with the more strictly surgical means, I have not unfrequently succeeded in effecting changes in the young maxillary bones, a simple description of which might cause my veracity to be doubted; and yet this ability to effect such changes must become very plain to us, if for a single moment we pause to consider the difference in the composition of the young and old bone. The young bone, or bone at birth, as we remember, is almost if not quite half made up of animal material; while in the osseous structure of the adult we have an excess in the limy, the unyielding material, of from seventy-five to perhaps quite eighty-five per cent.

Let me refer to that old experiment of the maceration of bone in dilute muriatic acid, to more familiarly illustrate this yielding constituent of bone. We know, if we subject a bone to the action of this acid for one or two weeks, that we may tie a rib as a whip-cord. Now we do this simply by reducing an old bone to somewhat the condition of young bone. I have removed a rib from a living young cat, and played with it in this same whip-cord manner. I have perceptibly bent the femur of a young child; but no one, I imagine, ever performed such a manipulation on the healthy femur of the adult. You may take an inferior maxillary bone, even in the child of fifteen years, where the projection of the chin is so great as to yield deformity, and with a properly-constructed vertico-mental elastic sling you may, in a period varying from three weeks to as many months, so change the angle of the bone as to do away entirely the deformity. You may take the projecting myrtiform fossa, and through the instrumentality of the occipito-alveolar sling, you may in quite a short period compel it to a natural articulation. On this known yielding character of the young bone, therefore, operations for the correction of congenital fissures of the hard palate may be founded.

A congenital fissure of the hard palate may be corrected instantly, or the cure may be effected slowly. The first of these procedures is applicable to such cases as present only a quite limited separation of the bones; the latter, when the fissure has considerable width.

The operative procedure for the immediate cure is as follows: An instrument for the compression of the jaw is first to be prepared. On page 631 of Professor Gross's work on surgery is the drawing of an arterial compressor invented by that gentleman, which, modified in two particulars, would answer the purpose very well. Such required modification will be readily understood when the steps of the operation come to be studied. They would consist—first, in diminishing the size of his instrument; and second, in having two oblong and curved pads, instead of the single bulbous and round one there represented, these pads being so arranged on the beaks of the instrument that when applied they would yield the lateral pressure required.

Still another instrument, and a better, for this purpose, because more simple, and with the ap-

plication of its force more direct, is the Hoey clamp, represented on page 868 of the same work. The only modification needed in this instrument is in the shape of the compresses or pads.

The instrument ready, (the patient being in proper condition,) the operator commences by paring soft parts and bone on both sides of the fissure, beginning on the approximal faces of the palate bones, and cutting forward to the alveolar face of the chasm. This part of the operation completed, the little patient may be allowed to rest until the parts stop bleeding. The next step is to re-etherize the child and apply the compressor, the curved pads embracing the buccal faces of the alveolar arch; by gradually turning the screw of the instrument, the yielding bones are brought together. The next and last step in the operation is to retain the parts in position by the use of compresses placed upon and below the malar bones, and secured by adhesive strips applied as in the occipito-labial cravat of Mayo.

It may be objected to these manipulations, that they are formidable and too heroic; that fractures may result, etc. On these points the surgeon must decide for himself. I can only answer that, if carefully performed, it is not a dangerous operation; fracture of the bone, even if it should occur, would be of little consequence, as the parts have to be kept, as it were, in splints at any rate, and consequently the treatment of the one would be the treatment of the other. The most marked risk would be from an inflammation that might be provoked; but a surgeon not unfrequently has to run much greater for even a less result.

Another mode of securing the same end, and which is entirely divested of formidable risk, is as follows: Take a circle of India-rubber tubing, the circumference of which shall be about one-third or one-half that of the child's head; next prepare two firm compresses, of a size adapted to the case under treatment; place then pads, or compresses, one on either cheek, in such position as will give them their rest on the buccal faces of the alveolar arch. These being secured in place by one or more delicate strips of adhesive plaster, take up the ring of rubber and pass it around the cervico labial diameter of the head. Passing over the compresses, it will thus exert, as is seen, a gradual pressure, serving to push the bone toward a common center, this center being the mesial line of the palatine arch. This process is a gradual one, but, if the patient is young, I think it will be found to succeed; the only real objection to the manipulation, that I can see, is the constant care necessary to prevent excoriation of the tender skin.

When, by this procedure, the bony parietes have been brought into contact, the operation, so far as the hard palate is concerned, is completed by simply paring the folds of the mucous membrane. It may or may not be necessary to coaptate them; if the bones have been brought very closely together, the granulations will alone be sufficient to bridge the slight chasm.

In either of these operations it is seen that the break, both in the soft palate and lip, is not remedial. It is well, I think, not to attempt the cure of the lip until the patient has entirely recovered from the forerunning operation. It may then be performed, and, if done according to a rule I shall hereafter suggest, will secure to the patient a lip so perfect that, in adult life, perhaps, no mark of an operation will exist. The operation for the cleft in the soft palate must be left to a period later in life, for reasons presently alluded to.

These suggestions for the cure of cleft in the hard palate were, I thought, original with myself, though it is of the least consequence who invents an operation, so that it is good; but in the periscopic department of the *Dental Cosmos* I find the following extract, made by Dr. Ziegler, from the *Australian Medical Record* and *Dublin Medical Press*, which shows that the operation was conceived by another before it presented itself to my mind. The extract is a short one, and so apropos to the matter, that I shall take the liberty to present it entire:—

"*Pressure in the Treatment of Cleft Palate.* —I am not aware," says the author, "that the subject of using pressure in treating fissure of the palate has been before suggested. I am inclined to think that it has not; for when the plan first presented itself to my mind in 1851, I carefully examined French, German, English, and American works to see whether it had. I was first led to try it on the dead body of a child, which had died three weeks after birth. The fissure was longitudinal, and large enough to admit the extremity of the little finger; fissure of the lip also existed. By means of a pair of clamps, the sides of the fissure were brought readily in contact, without any fracture or displacement of the bones; the only fault was that the gums of the upper jaw were within those of the lower; but Nature would modify this as the living child grew up; the use of pressure on the lower jaw would remove a great

deal of this deformity; of course the amount of deformity would depend on the size of the fissure in the palate. I several times repeated the experiments on young dogs, removing a piece of the palate bone by means of Hey's saw, and then applying the pressure. The animals did well.

"The operation should be performed as early as possible after birth, when the bones are in their softest condition. The following is the plan which I would suggest: The edges of the fissure having been pared, the superior maxillary bones should be embraced by a horseshoe-shaped clamp, with a shelf on its lower border to receive the gums and prevent it slipping. It should be padded with India-rubber or some other material to prevent the germs of the teeth being injured. The clamp should work on a joint, and possess arms. It may be said to resemble a large pair of pincers with horseshoe-shaped blades. A screw may be attached at the extremities of the handles, for the purpose of bringing the blades in contact, or the hands may be used: the former would be, I think, preferable, as the force could be applied gradually, and not be likely to be carried too far. It may also be employed in grown-up children, when the bones are so widely separated as to render it difficult to get soft parts enough to close the opening, but in a gradual manner and at intervals, more or less prolonged, according to the amount of pain it excites. If it were used suddenly it might produce inflammation, and subsequently abscess, which would prove troublesome to treat. From the foregoing it will be, I hope, understood that the younger the child the safer the operation is likely to prove, and that even in grown-up children it may be adopted, with precaution, with decided benefit.

"The pads and the ledge to rest the teeth upon should be made to slide in the sides of the clamp; the former, that the pressure may be directed on any part of the bones; the latter, that the edges of the teeth may rest on it, without the pressure being directed either too high or too low, but at the point where the palate bone joins the superior maxillary."

We pass now to the consideration of the treatment of the fissure in the soft palate. This operation is known as staphyloraphy, deriving the name from two Greek words, which signify suture of the uvula. As generally practiced, it is an operation rather difficult of performance, and so frequently unsuccessful that surgeons seem disposed to avoid the responsibility of it. I propose here to suggest for consideration a new mode of doing the operation, and which, I will take the liberty of saying, render the manipulations as easy of accomplishment as, by the old mode, they are found tedious and difficult.

Preparation of the patient.—For weeks before it is designed to do this operation, preparations are to be made for it, by subjecting the parts to such daily manipulations as shall educate to forbearance the natural sensibility of the fauces. Without such preliminary manipulation, the retchings and spasmodic twitchings would be such as to render a proper performance of the operation almost an impossibility. With such an education the parts will be found to assume, in a reasonable time, quite a stoical indifference to even quite severe irritants. This forbearance is secured by roughly fingering the part daily. I think it is not amiss to occasionally pass the point of the tenaculum through the parts to be operated upon. I never knew the trifling wound to give any trouble, and you gain the double advantage, if you put the part on stretch, of securing an estimate of the capability of the velum to be brought to the mesial line, an important item in the operation, as will be easily appreciated. Some surgeons are in the habit of daily tickling the parts with a fine brush; this, I should suppose, would answer a very good purpose. A very admirable idea, and a most successful one, is to have made an obturator,* which shall extend back to the palate border, or nearly to it. This is to be placed in the mouth, and as soon as the irritability it produces is so far overcome as to permit of its permanent retention, the bands attached to it are to be clasped firmly about the necks of the teeth, and it is worn continuously for one or two months. When the parts have thus submitted to the presence of an obturator, they will be found quite ready for any operation.

On the evening before the day of operation let a saline cathartic be given the patient—particularly if he is robust and strong. The meal immediately preceding the performance should, I think, always be a good substantial one, for it is to be remembered that the patient is to have little to eat for some time.

In operating on the depressed and anæmic patient, let his deficiency in vital forces be first considered, and, as far as possible, let it be corrected. If such attention is neglected, you will be almost sure to make a failure, the parts will not unite. Exercise in the open air, generous living, and the iron tonics may be prescribed. To sum all up in a single sentence, the preliminary treatment must meet the indications of each particular case. If, for example, you should operate on a scorbutic patient, or a patient disposed to purpurea, with-

* A description of this instrument, and its proper use, will hereafter be given.

out correcting such dyscrasis, you would be no more likely to gain union of the parts brought together than in an operation on the cadaver.

The surgical anatomy of the part is required fully to be understood. So much of success depends on a thorough knowledge of the muscular relation to the cleft, that such acquaintance would give a success where otherwise a failure would be sure to result. This anatomy we may study before taking up the steps of the operation.

To get a correct idea of the soft palate, we should commence the study of it, by first carefully examining the parts on the living subject. When we look into a living mouth we see an arch stretching from every portion of the alveolar edge backward and inward, toward the fauces, terminating in a tongue or uvula, pendant in a horizontal direction from its center. One-half of this arch is seen to be fixed, the other—the posterior half—is seen to be in almost constant motion. If, now, the finger is carried into the mouth, the fixed part is found to correspond with the boundaries of the palatine faces of the maxillary and palate bones; that is, for a certain extent, you feel that the parts are solid, as if the finger passed over an arch of bone which might be covered alone by mucous membrane; and this is, in fact, about the case. The finger traverses the anterior bony border of the mouth or the hard palate. As, now, the finger is passed backward, it falls over a hard ridge upon parts that are soft and yielding; this hard ridge is the posterior face of the palate bone, and terminates the hard palate. The parts upon which the finger has fallen is the veil or soft palate, the part that was observed to be movable. This is the part in which occurs the rent or cleft, for the cure of which is demanded the operation we are about to consider.

The mobility of this part, and which pertains to its function, depends, as may be anticipated, on an associated muscular structure. To study properly this structure, and which is all-important to be practically understood and appreciated, the student should take up the scalpel, and pass to the cadaver; it is, perhaps, only by dissecting that a really satisfactory idea of these muscles can be secured; that is, as pertains to that kind of knowledge which gives confidence when we come to perform operations upon the part.

The external coat or covering which we see on every mouth, living or dead, is the mucous membrane; simply the continuation of that which covers the hard palate; but, while in the case of the hard palate we find all the underlying structure osseous, in the soft palate we discover this deep tissue to be made up exclusively of muscular tissue—at least as far as surgical anatomy is concerned, or as it alone serves our purpose here to study it.

Commencing with the mesial line, we can dissect out the attachment of five muscles, each of which is, of course, duplicated on the opposite side, and each of which has such relation to this mesial line that, in case of cleft or split, it serves more or less to draw away the parts posterio-laterally.

These muscles, mentioned in the order of their signification to this lateral displacement, and consequently in their relation to the operation of staphyloraphy, are tensor palati, palati glossal, levator palati, palati pharyngeal, azygos uvulæ. But of all these muscles the tensor palati plays the most important part, and is, therefore, entitled to closest consideration.

This muscle arises from the scaphoid fossa at the root of the internal pterygoid plate, from the anterior surface of the Eustachian tube, and from the spinous process of the sphenoid bone. If you carry your finger (in your own mouth) back to the wisdom tooth of the superior jaw, and let it drop over and back of this tooth, it will fall on the tuberosity of the maxillary bone; carry it now half an inch farther back, and it will come to a second prominence; this is the hamular process of the pterygoid plate of the sphenoid bone. Now the tensor palati muscle descends from the origin of which we have just informed ourselves, and meeting this hamular process, it winds—as a tendon—around it, and then, by a fan-like expansion, spreads itself over the soft palate. Its action is evident; it expands laterally the palate.

Now to do successfully the operation for cleft palate, it is perhaps desirable, in every single case, that the strain made by this muscle should be taken off. A moment's reflection will show us that the action of the muscle, in case of a cleft, would, when the parts were brought together, be much increased over its natural capability, not only because it would be put considerably on the stretch, but because such stretch would, more than likely, excite it to a spasmodic contraction. The muscle, of course, then is to be divided; and we may as well here, as anywhere, consider the easiest point at which such preliminary operation can be done.

We remarked, of the muscle, that it would be

found winding—as a tendon—around the hamular process. It winds from the back, and outwardly, inwardly, and forwardly, so that just in front of the process, between it and the tuberosity, is the convenient place at which its section may be best performed; there are here no important vessels to be wounded, if we except the posterior palatine artery and nerve, and they so closely hug the base of the tuberosity that it would, I think, have to be a very badly managed knife that could possibly interfere with either of them. The cut should be a little oblique. The interference with function, as in all cases of myotomy or tenotomy, would be, of course, but temporary. The action of the muscle would be found recovered quite as soon as our cleft operation would be ready for it.

The next most important muscle is the palati glossal; this is simply the anterior half arch, the constrictor isthmii faucium. It arises, as will be seen, from the soft palate on either side of the uvula, and, passing outward, is inserted into the sides of the tongue, blending with the fibers of the stylo-glossus muscle.

The palati pharyngeus arises from the soft palate, by an expanded fasciculus, and, passing outward, goes to be inserted into the posterior borders of the thyroid cartilage. These muscles constitute the posterior half arches. Section, both of the palati pharyngeus and palati glossal, is to be made through the substance of the muscle, and is accomplished simply by nicking, somewhat deeply, the arches; four cuts—one to each arch. These nicks are best made with the scissors.

To be continued.

Physical Signs of Pulmonary Tuberculosis; their Practical Value as Means of Diagnosis.

By A. P. Dutcher, M.D.,

Enon Valley, Lawrence Co., Pennsylvania.

PART FIRST.

There are many physicians who can remember the period in their medical history, when the physical signs of chest diseases were but little known or understood. The great mass of the profession were groping their way in the dark, without scarcely a ray of light to guide them to a correct diagnosis. And even after the art of auscultation had made considerable progress, and its utility had been clearly demonstrated, there were not found wanting men in the profession who would reject its teachings, and ridicule those who practiced it.

I remember, when a student in the City of New York, of hearing a distinguished physician give his opinion of auscultation in this wise: "It is," said he, "a tube made of wood, with the chest of a fool at one end, and the ear of a knave at the other." Such was the contempt with which this valuable art was treated twenty-five years since, by some of the most prominent medical men in our country. But happily for medical science the day is past, when any respectable member of the profession will stand up and seriously controvert its utility. Its importance is universally admitted.

In this article, we propose to call your attention to a brief description of some of the more prominent physical signs of pulmonary tuberculosis, and their practical value as means of diagnosis. They may be classed under three heads, namely—1st. Inspection. 2d. Percussion. 3d. Auscultation.

1st. *Inspection.*—When we are to examine an individual's chest, we prefer that he should be in the sitting posture, and placed in such a position that we have an abundance of light. It is also proper that all the clothing should be removed from the chest, particularly in males; in females, decency requires that it should be covered with some material that will not obscure its motions—a common dressing-gown of thin cotton will answer a good purpose. When thus placed, we may stand in front of the patient, at such a distance as we can scrutinize the motions of the chest carefully.

In health, if there be no deformity of the chest, the expansion of the two sides are equal, and its symmetry complete. And it requires considerable tubercular, or any other consolidation, to produce any irregularity either in its motions or shape. But, when we do perceive a slight difference between the two sides, the upper ribs do not move so much on one side as the other. And it may be laid down as a fundamental principle, which has been verified by universal experience, *that the movements of the chest become restricted in freedom, and altered in character, in proportion to the quantity and extent of tubercular consolidation.*

In the commencement of pulmonary tuberculosis, where there is but very little matter deposited, and contained within a small space, or, as is sometimes the case, scattered widely through

the lungs, it is evident that very little or no appreciable difference would occur in the expansion movements of the chest. But, as the disease advances, the expansion movements are generally not so strong or free; and it is not a very uncommon thing to find cases where, from extensive tubercular infiltration, one side of the chest is almost motionless. The irregularity of motion, however, is mostly confined to the superior part of the affected side, and keeps pace with the progress and extent of the internal lesion.

We also, sometimes, notice in this disease that, after the expansion movements have ceased in the affected side, it will look contracted, and the well side will have the appearance of being elevated. The first is real, while the latter is not. We should not, therefore, place too much confidence in this appearance as a sign of phthisis, for it is frequently present in other diseases of the chest; but, when associated with some of the other signs about to be described, its significance is greatly enhanced.

2d. *Percussion.*—The best position in which a patient can be placed, for percussing his chest, is standing, if he is able, with his shoulders resting against the wall of the room. If he is too feeble to stand, let him sit in a chair, high enough in the back to support the shoulders. Or if, as it frequently occurs, the patient is unable to rise from his bed, see that all the pillows are removed, and that he lies upon his back, and on a mattress. The chest should be fully exposed, with those exceptions named under the first head. When the anterior part of the chest is to be percussed, we generally prefer that the patient should put both hands upon the back of his head, and when the posterior is percussed, with the arms crossed equally upon the breast; in this manner the muscles of the chest are rendered tense, and the different sounds are more easily elicited.

In the incipient stage of tubercular consolidation, the resonance of the chest is but very little diminished on percussion. But as the lungs become more indurated, dullness is one of the most prominent signs. In this disease, the most numerous and largest tubercular deposits occur at the apices of the lungs, and generally more on one side than on the other. Hence the clavicle on one side, when lightly struck on its center, may yield a sound duller than the other; if this should be the case, it is quite probable that there are indurations in the lungs.

Great care must be taken to percuss both sides of the chest at the same point, or the comparison will not be correct. To avoid error, various kinds of percussion should be used, particularly in doubtful cases. We have more confidence in *immediate percussion* than mediate. The tapping may be conducted at first with a single finger, then with the flat of several fingers, and in different stages of the respiratory act, on a full breath, and after exhausting the lungs. Sometimes the gentlest patting of the subclavian space is the only mode in which any difference can be discovered.

When percussion elicits dullness under the clavicle, we generally find that it diminishes as we pass a little lower down in the chest. Thus, on the first rib, we have a perceptible dullness, while on the second, or rather the third, we have a natural resonance. This is the case, so long as the induration is confined to the upper part of the superior lobe, but when it includes the whole lung, the dullness is pretty generally distributed over the entire side. This is more particularly the case from pneumonic consolidations. It sometimes occurs, that both lungs become equally affected with tubercular deposits. When this occurs, we lose, in a great measure, this important means of diagnosis, especially when we institute a comparison between the condition of the two sides. We, therefore, make the following inferences:—

1st. Dullness on percussion is a sign of induration in the lungs.

2d. Its location sometimes points out the nature of the induration.

3d. When situated only at apex of the lung, we may conclude that it is tubercular.

4th. That it points out the extent of the lesion.

5th. That it can only be taken in proof of pulmonary tuberculosis as it is found associated with other signs and symptoms of the malady.

3d. *Auscultation.*—There are two kinds of auscultation employed by physicians in detecting diseases of the chest, viz., immediate and mediate. We generally employ the latter, and the instrument which we have been in the habit of using for several years is Dr. Camman's Double Self-adjusting Stethoscope. This instrument is so constructed that it intensifies all the sounds of respiration to a great degree. Healthy sounds that cannot be heard by the naked ear, become quite manifest by using it. So also morbid sounds that are not recognizable by the ear, become quite audible while using this instrument.

The reasons for this intensity of sound appear to be—1. Both ears of the observer are acted upon at once. 2. The ear pieces of the instrument fitting tightly to the meatus of both ears, all external sounds are more thoroughly cut off, and the mind of the auscultator is thus forcibly drawn to the phenomena taking place within the chest. To the physician, therefore, who is dull of hearing, I consider it an instrument of great value and indispensable utility in exploring the chest, and detecting the various diseases which affect the pulmonary organs.

In describing the various auscultatory signs of pulmonary tuberculosis, we will notice them in the order in which they usually manifest themselves in the different stages of the disease. In the first stage we have:—1st. Prolonged expiratory murmur. 2d. Wavy inspiration. 3d. Dry crackling.

Second stage:—Humid crackling.

Third stage:—1st. Cavernous respiration. 2d. Pectoriloquism. 3d. Crack pipkin sound, (Percussion.)

1st. *Prolonged expiratory murmur.*—This is the earliest sign elicited by auscultation, of pulmonary tuberculosis. When we examine the chest of a healthy individual, we find, with few exceptions, that the expiratory murmur is very slight, and very little more distinct in any one part of the chest than another. The lungs naturally are very elastic, and this elasticity is necessary to soft and uniform breathing. Now when any considerable portion of their textures become consolidated by tubercular deposits, the harmony of their action is destroyed; bronchial expiration is greatly promoted; but between the state of health and decided consolidation there are various intermediate conditions.

Thus when the air-cells are but slightly thickened by tubercular infiltration, bronchial expiration is not induced, but as they become more affected they render the respiratory murmur more audible. When there is no obstruction in the pulmonary air-cells, the inspiratory murmur occupies the whole time of inspiration; but the expiratory murmur does not occupy more than one-fourth of the time of inspiration. Hence it has been found that with the progress of phthisis, the duration of the expiratory murmur usually lessens materially, and the expiratory is sensibly prolonged, so much so, that instead of only occupying one-fourth part of the period of healthy inspiration it may come to exceed it in duration.

Some writers place but very little value upon prolonged expiratory murmur as a sign of pulmonary tuberculosis. They tell us that it is surrounded with so many qualifications that it cannot be relied upon as possessing any value as a sign of the disease. May not the same be said of nearly every other sign? for they are all to be guarded with exceptions. And we are fully satisfied, from personal experience, that where this sign is absent, the existence of tubercular deposits in the lungs cannot be affirmed with any certainty. We do not, however, pretend to say that we may not occasionally meet with a case of phthisis where it is absent, and that it may occasionally occur in other disorders of the chest, but we do maintain that prolonged expiratory murmur is an outstanding sign of pulmonary tuberculosis, and in the first stage of the disease is more to be relied upon than any other.

2d. *Wavy or jerking respiration.*—Any condition of the lungs that will prevent their free expansion will occasion the phenomenon of wavy or jerking respiration. Thus quite opposite causes may produce it, such as pleurisy, asthma, and various affections of the heart and nervous system. It is generally revealed during inspiration, and consists of a variety of puffs or jerks instead of the regular and smooth breathing of healthy inspiration. It is often met with in the first stage of pulmonary tuberculosis, near the apex of the lung, but is of no especial value as a sign of the disease, only as it is found in connection with dullness on percussion, prolonged expiration, and Thompson's gingival margin.

3d. *Dry crackling.*—This is commonly one of the earliest signs of tubercular deposits in the lungs. It is usually heard at the apex, mostly in front, and consists of several sharp, dry, explosive, and distinct crackling râles. It is most commonly heard at the completion of inspiration, and requires a forcible act of respiration for its development. Thus, on making a forced inspiration it may become distinctly audible. Sometimes this forced inspiration will develop only a single râle, at other times three or four, which will startle us by their clear, dry, and metallic sound.

When this sign is once fully developed, its persistence is constant, although it may be more manifest at one time than another, and it seldom ever ceases entirely until it passes into what is termed humid crepitation, or moist crackling rhonchus, which is its natural tendency. As the

disease advances, and the lungs become more occupied with tubercular deposits, dry crackling may be frequently heard during ordinary respiration. When it becomes thus manifest, it is one of the most unfailing proofs of pulmonary tuberculosis that we can have.

There are several other physical signs of the first stage of phthisis, that have been described by writers, such as pulmonary crumpling, cogged-wheel sound, and tubercular crepitation; but they are of so little value as means of diagnosis, that we will not occupy space with their description. Those already noticed are sufficient for all practical purposes, and he who becomes thoroughly acquainted with them, will have better success in detecting the disease than he who has but a vague and superficial knowledge of twice the number. Knowledge of any kind to be of use must be simple, definite, and positive. We need more of this kind in the practice of medicine, and when we have it the profession will become more united, and more proficient in their efforts to cure disease.

PART SECOND.

The physical signs connected with the softening of tubercular matter are not very prominent Indeed, I know of no one that is positively indicative of it. It is to be supposed, however, that all the signs that pertain to the first stage will in this be either increased or modified, while others will be added. The inequality of the respiratory movements and the dullness on percussion are now generally more marked, the respiration more obscure, or more bronchial, and accompanied by permanent *humid crepitation*, which is generally indicative of tubercular softening. When this takes place, we may look very soon for some of the signs which belong to the third stage of the disease; particularly:—

1st. *Cavernous respiration.*—This is a hollow sound, especially when the cavity is large. Some writers have compared it to an exaggeration of bronchial respiration. As soon as a portion of tubercular matter is discharged through the neighboring bronchial tube the cavity has commenced, and the sound produced through these little cavities may be of various kinds. It may be, and often is, a mere click, like the opening and shutting of a valve; or a chirk, or a crackling; but all these sounds, under certain circumstances, denote the formation of a cavity, and for convenience sake have been all included under one name—cavernous respiration. For brevity it is sometimes called *clicking*, as this is frequently the most prominent feature of the sound.

The various sounds in cavernous breathing are owing to the difference in size, form, and situation of the cavities, and to the different condition of the surrounding lung. A cavity may be very large or small, several bronchi may open into it, or only one. It may be a simple cavity, or it may have several chambers. Its sides may be condensed and equal, or rough and rugged. The lung around it may be solid, or pervious and vascular. It may be near the ribs, or far from them; adherent to, or separated from the pleura. It is quite obvious that these differences in condition are calculated to modify the sound, which will nevertheless be always such as to indicate a cavity, particularly when distinctly heard at the apex of the lungs.

Cavernous breathing is also sometimes associated with other lesions of the chest, such as bronchial dilatations, and pneumonic cavities. But at the period of pulmonary tuberculosis now under consideration, there are so many other physical signs connected with it, that we need not be in much doubt as to the true import of its teachings. In tubercular cavities, clicking is almost uniformly heard at the apex of the lungs, while in bronchial dilatations and pneumonic cavities, it is heard much lower down. The sound of clicking is best obtained by quick, forcible respiration or slight coughing, which increases the force and velocity of the passing air, and exaggerates the sounds.

2d. *Pectoriloquism.*—This is another very prominent sign of a cavity in the lungs. Laennec regarded it as the most important and valuable of all the physical signs of phthisis. Subsequent writers have not looked upon it with the same degree of favor. Some of them regard it as the most fallacious of all the physical signs of pulmonary tuberculosis. But our experience teaches us not to treat it in this light, and we can safely say, without any mental reservation, that if there is one sign that is pathognomonic of this malady, that sign is pectoriloquism. Let us examine its nature and some of its peculiar features.

When a cavity of any considerable size exists in the lungs, by placing a stethoscope directly over it, and directing the patient to speak, we will hear the sound of his voice as plainly as if it came from his mouth. This is the sound in question—pectoriloquism, or chest speaking. And it will

be more or less perfect according to circumstances. And it may be said in the first place, to be perfect, when the sound of the voice transmitted through the stethoscope is complete, and in the second place, it is imperfect, when the sound of the voice is wanting in some of its essential tones as heard from the mouth.

1st. The circumstances which render pectoriloquism perfect are: the complete emptiness of the cavity, the increased density of the portion of lung which forms its walls, its communication with one or more bronchial tubes of a certain diameter, and its proximity to the walls of the chest. It is proper to state, however, that whatever be the distance of the cavity from the surface of the lungs, if it possess the other qualities indicated, it will always yield perfect pectoriloquism, unless a very considerable thickness of healthy lung be interposed, which, owing to its defective density, is necessarily a bad conductor of sound. The extent of the cavity also contributes to the perfection of the phenomenon.

2d. It will be imperfect when the cavities are very large and their openings with the bronchia are very small. It will, also, be incomplete when a cavity opens into the pleura, particularly if the opening be large, and when its contents make their way through the walls of the chest into the cellular membrane outside. It may likewise be frequently suspended for several hours, and even days, by the temporary obstruction of the communication of the cavity with the bronchia, by the matter contained in it.

This sign is most characteristic of phthisis when it is located just under the clavicle, and is very circumscribed. But tuberculosis may, however, exist when it is more diffused; for, as we have already observed, besides the cavities there may be extensive consolidations of the lungs, and consequently free transmission of the voice over an extent of surface. Even in this case a practiced auscultator can distinguish the peculiar phenomena of cavities, in the blowing or tinkling, and the more articulate voice that certain spots present. But I would caution the young practitioner not to be too hasty in concluding upon the existence of cavities, from this sign alone. I have known some very good auscultators deceived by it. M. Louis mentions a case of this kind which occurred in his own practice.*

* Louis on Phthisis, p. 212.

3d. *The cracked pipkin sound.*—This is a very sure sign of a cavity in the lungs. It is usually elicited by a smart stroke given just below the clavicle while the patient's mouth is open. It is called by the French *bruit de pot félé*, from the idea that it resembles the sound produced by striking a cracked pipkin. The sound may be imitated by doubling the hands together rather loosely, and striking the back of one of them against the knee in such a manner as to allow the escape of a small quantity of air. The production of this particular sound, by percussing the chest, is owing to the proximity of a considerable cavity, having yielding walls, and a free communication with one or more bronchial tubes. If, therefore, when a patient's mouth is open, we strike smartly over a cavity, air escapes freely and suddenly into the bronchus, and thus the peculiar sound in question is produced.

I have, however, heard this sound where there was no cavity in the lungs. This may occur where the chest is unusually sonorous from emphysema, or bronchial dilations and mucous engorgements. It should, therefore, not be too much relied on as a sign of vomica. Indeed, it is not wisdom in the physician to judge of a case entirely by the physical signs alone. We should carefully compare them with the general symptoms, and previous history of the case. Any practitioner who relies too exclusively upon the physical signs, will sometimes commit the most flagrant errors in his diagnosis; whereas if he had taken a more general and comprehensive view of the case, he would have saved himself from the mortification which necessarily follows in the wake of such errors.

Oil of Turpentine in Typhoid Fever.

By Edmund L. B. Wales,
Of Tuckahoe, N. J.

It has, perhaps, fallen to the lot of most practitioners of medicine to have their directions, however carefully given, occasionally misunderstood, and happily, if with no worse results, than in the case I am about narrating. During the course of last month I was attending on two persons sick in the same room, with fever of a typhoid type. They were a father and son; the son, a lad about ten years old, and so extremely ill, at the period to which I advert, as to make me despair almost of a favorable result in his

case. The brain seemed to be the chief seat of the disease. The manifestations of it were muttering delirium; somnolency, amounting almost to stupor; subsultus; picking at the bedclothes; countenance, though bad, expressive of flitting emotions, mostly painful, though occasionally of a pleasurable nature. Pulse ranging between 130 and 140; tongue red and dry, and a sordid incrustation on the teeth. The treatment had been alterative doses of cal. and James's powder, alternated with a julip of carbonate of ammonia; iced water to the scalp, and counter-irritation. At the time of modifying the directions, and which is the chief point in the case, I was led to suppose that small doses of the oil of turpentine might be salutary, and accordingly ordered 4 drops of that article, given every two hours, in the preparation of ammonia which he was already taking. Instead of 4 drops, however, 4 teaspoonfuls were given and persisted in, till nigh two ounces were in this way consumed, and till, in short, the irritation on the bowels, and revolt on the part of the little patient, had caused the dose, first to be diminished a teaspoonful, and at length to be discontinued a short time prior to my subsequent visit. In other words, nearly 2 ounces of the article had been taken in the manner above stated, in twenty-four hours. But, what was strange in the case, was, that the lad was evidently enough, even to the friends, a shade better at the close of these twenty-four hours, and so gradually improved, and is now well. The case has interested me very much. I theorize on it in this way: the action of the turpentine caused a new focus of irritation, and the brain was relieved at the expense of the bowels. It is curious in another particular. One of the knottiest points, as it appears to me, in pathology, is to determine how far morbid action may go, before superinducing structural lesion, and then, in vital organs, whether these lesions are of sufficient extent to be incompatible with recovery. It is this that embarrasses us so much in our prognosis and makes it so necessary to be guarded. In conclusion, we may remark that in an experience of over thirty years, we do not remember to have seen so many fevers of a typhoid character as we have met with in the course of the present fall.

At Rouen, a few days ago, twin sisters, the wives of two workmen, at a few hours from each other, gave birth each to twin boys.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

PURULENT OPHTHALMIA OF ARMIES.

In the *Chicago Medical Journal* for August, Dr. E. L. Holmes, of Chicago, has an article upon the above subject. As this is often a very troublesome disease in armies, anything concerning it may be considered of importance at the present time.

"In a large proportion of uncomplicated cases, when the inflammation is confined principally to the palpebral conjunctiva, rendering them highly vascular and œdematous, we consider the use of solutions of argenti nitras, varying in strength from ℈j, ℈ij, or even ℈ijss to the ounce of water, as most reliable, *provided they are properly applied.*

"We never drop such collyria under the lids, for, thus introduced, they are to a certain extent neutralized by the salts of the secretions, and prevented from passing equally over the whole surface of the conjunctiva by the spasmodic contraction of the lids.

"To the conjunctiva of both lids, exposed as much as possible by inverting the upper lid and drawing down the lower lid, we first press gently a piece of dry linen for the purpose of removing all moisture and mucus. Upon the whole surface thus prepared we paint some one of the solutions above mentioned, by means of a large but short camel's-hair pencil, *thoroughly moistened* in the solution and yet *not saturated* with it. The brush should be passed freely over the surface till the whole conjunctiva presents the characteristic white appearance produced by argenti nitras, after which the moisture should be again removed with the linen and the lids returned to their natural position. One application of this kind a day is usually sufficient. The stronger the solution, the less freely it should be applied to the inflamed suface.

"We have followed this method with such good results in so many cases, that we would recommend it to all who have never tried it, where strong caustic solutions are indicated."

CIMICIFUGA RACEMOSA.

In the Reporter for August 17th, we gave an abstract of an article upon the above subject, by Prof. N. S. Davis, of Chicago, and followed with a few remarks of our own. Speaking of its properties, we said:—

"We think it has, in some of its properties, a striking resemblance to the Peruvian bark—a tonic, and yet a sedative, with a peculiar action upon the nervous system; and, perhaps, by its action on the nervous system, influencing the secretions and excretions. From this similarity, it seems to us *it ought to have an influence upon malarious diseases.*"

In the *Journal of Materia Medica* for August, Dr. Charles A. Lee has an article upon this remedy, in which the following language occurs:

"We have known it used *successfully* in several cases of *intermittent fever*, of a mild type, and when of recent origin; but where the paroxysms have continued for any great length of time, it cannot be relied on with any certainty."

Will some of our readers, who live in malarious regions, put this remedy to the test in this disease? It may be too late to do so this year, but please remember our request until the next. From our location, we have not an opportunity to test the matter our self.

Our suggestion is, that the remedy be given in such doses or quantity as will produce moderate vertigo and dimness of vision, just a little before or near the time the paroxysm is expected. It may be given in one, or, better, in divided doses, repeated every hour, for from four to six hours, anterior to the paroxysm. We would advise its combination with opium, as is mostly done with quinine—the opium to be so given that the patient shall get from three to four grains before the paroxysm. It is not expected that it will be found to be a substitute for quinine. But if, in intermittent fevers, it can be relied upon, even in a minority of cases, as a means of cure, or, by a combination with quinine, will lessen the amount of the last named, otherwise necessary to effect a cure, this will be, if not now, probably at some future time, no small desideratum.

While upon this subject, let us make a comparison of some of the physiological effects and therapeutic properties of *cimicifuga racemosa* and *sulphate of quinine*, while at the same time we further consider Dr. Lee's article.

Dr. Lee says this remedy acts largely upon the "encephalon and the nervous centers." No one will question that quinine has a powerful affinity for the nervous system also. Dr. Lee says of the cimicifuga, "when used freely, it certainly causes vertigo, dimness of vision, etc." It will also produce an unpleasant feeling, and even pain in the head, flushed face, etc. Quinine in full doses will develop all these symptoms.

Dr. Lee says:—

"The cimicifuga has a decided and well-marked influence over the capillary system of vessels, moderately increasing all the secretions; particularly those of the skin, kidneys, and bronchial mucous membrane."

We believe these properties also to be possessed by quinine in a very marked manner, as we have attempted to demonstrate on several previous occasions.

Dr. Lee regards the cimicifuga "in the light of a renal alterative; increasing generally the amount of solids in the urine, without any great increase in the quantity of water." Quinine, likewise, certainly increases the amount of solids in the urine.

Dr. Lee says:—

"As a parturifacient, it was in general use among the Indians in the early settlement of the country: hence, called squaw-root; and it was first employed in New England to accelerate the pains of labor. *Bigelow* speaks of it as an active agent in facilitating parturition." * * * "I could give the names of several practitioners of my acquaintance, who are constantly in the habit of using it in such cases, as a substitute for ergot, and with satisfactory results."

There are several physicians in this country who regard quinine, in ten-grain doses, as the best parturifacient known.

Dr. Tully says he has "known many cases, where it has produced abortion in pregnant females, when prescribed for a cough."

The same results have been attributed to quinine, and there are those who dare not give it in full or large doses to a female in pregnancy.

Cimicifuga, in full doses, lessens the frequency of the pulse. Quinine does the same.

In our article in the Reporter, above referred to, we said:—

"In those cases popularly denominated 'a hard cold upon the lungs,' it has pleased us as well as anything. Three or four tolerably full doses per day, with eight or ten grains of *Dover's* powder at bedtime, will generally give satisfactory results."

It may be known to some in the profession that for many years we have treated *inflammation of the lungs* with *quinine and opium*, with results much more satisfactory than from any remedies previously used by us.

In this connection, though somewhat foreign to our subject, and yet bearing upon the treatment of pneumonia with quinine, we cannot resist the inclination of quoting a remark or two from an

article by Dr. Nelson Nivison, of Hector, New York, in the *Amer. Jour. Med. Sciences* for July, we think, though we have never seen the original. Quoting from Dr. Corrigan, of Ireland, the following—"Quinia appears to possess the same power in giving contractility to the capillaries in the lungs, which we know it possesses in so marked a degree over the capillaries and venous radicles in the spleen," he adds :—

"This property of quinia gives us a power over almost all forms of venous and capillary *congestions* which, perhaps, it is impossible to obtain by any other known agent."

We have maintained that, in pneumonia, when the pulse was over one hundred, quinine would invariably reduce it. Dr. Nivison says :—

"Another effect of quinine on the circulation is that of *approximating* the frequency of the pulsations to the healthy standard, when *much too frequent* or much too slow."

He further observes :—

"But perhaps the most remarkable effect of quinia on the blood is the fact that it *defibrinates* it, and renders it fluid and incoagulable. This fact may throw some light on its action in preventing and overcoming congestion, and *subduing* many forms of *inflammation*."

Returning to our subject, we may observe that we are by no means alone in regarding quinine as a nervous sedative, and if not an arterial sedative also, at least it lessens the frequency of the pulse by its action on the nervous system. Continuing the similarity, we quote Dr. Lee as saying :—

"We are satisfied, from observation and the experience of various practitioners, on whose testimony we can place the fullest reliance, that the *cimicifuga* will, without any obvious disturbance of the stomach or the sensorial functions, reduce the frequency and force of the pulse, allay pain, and relieve nervous irritability."

Dr. Lee says :—

"Where there is morbid heat and dryness of the skin, from irritative fever, the cohosh will, if given in considerable doses, abate the irritation, and be followed by relaxation and gentle moisture."

Under similar circumstances, we regard quinine combined with opium as the most certain and free diaphoretic we ever used.

Remarking for a moment upon the comparative therapeutic effects of the two remedies, we observe that Professor Davis and others regard the cohosh as almost a specific in rheumatism.

When properly combined and qualified, we believe quinine possesses remarkable properties over this disease.

In *chorea* it is admitted that the cohosh has a decided curative influence, and this might have been conjectured from the resemblance between chorea and rheumatism. Quinine combined with strychnine and the Cannabis Indica we believe to be the most certain remedy in chorea known.

We might follow up the comparison, but want of space forbids. Enough has been said to show that the cimcifuga is deserving of more extended trials, and its effects subject to closer observations. Will some chemist isolate its medicinal principles, if more than one is possessed, that each may be separately tested?

AMERICAN INDIAN HEMP.

In the *Journal of Materia Medica* for August, Dr. Charles A. Lee has an article upon the Indian hemp of America, (apocynum cannabinum,) in which, though he classes it among the *alteratives*, he speaks very highly of it as a hydragogue cathartic and diuretic, and as very efficacious in several forms of dropsy. He thinks it is quite as powerful for good as, and less irritating than, most remedies of this class. In small doses, he regards it an alterative tonic; when given in full doses, especially in chronic cases, he would give it conjointly with quinine or some similar remedy.

After detailing several remarkable cases of cures effected with this remedy in dropsies, he adds :—

"My own experience with this remedy in dropsical affections has been somewhat extensive, and I can cheerfully add my testimony to that of others already quoted.

"I regret that I have not kept a record of the numerous cases in which I have employed it; in several the effects were as striking as in those above related; in some, the usual remedies had been tried and abandoned. The objections alleged against it, as to its uncertainty, and its occasional violent action, are really unfounded, inasmuch as they arise from carelessness or ignorance as to the proper mode of using it. It need not occasion the slightest nausea; nor need it act powerfully, as a hydragogue cathartic, or cause powerful sweats. The rule of administration is to begin with a minimum dose of the decoction, and gradually increase till the desired effect is produced. There is no instance on record where death has followed from an overdose of any of its preparations, so that if it is an acrid narcotic, as some allege, it is one of the mildest."

In regard to the mode of administration, we quote the following remark :—

"As the active principles are supposed to be all taken up by water, the decoction is generally preferred. That made with two drachms of the

coarsely-powdered root to one pint boiling water, steeped in a covered vessel half an hour, will ordinarily be of sufficient strength, of which a tablespoonful may be given three times a day, as an alterative tonic. If it causes nausea, some aromatic, as sassafras root, calamus, cardamom, cinnamon, or cloves, may be added. In chronic cases, nausea should be guarded against."

DIGITALIS IN DELIRIUM TREMENS.

In the *Pacific Medical and Surgical Journal* for August, its editor, Dr. David Wooster, reports a very interesting case of *delirium tremens* successfully treated with digitalis. The case was one of the worst form, and "had been judiciously and carefully treated, according to the usual methods, for *four days* previous to the fourth of August, during which time he had neither ate nor slept. At first, *four drachms* of the undiluted tincture of digitalis were administered, and manifest improvement followed. One and a half hours later he administered *four drachms* more. Two hours and twenty minutes later *four drachms* more were administered, making six drachms of undiluted tincture of digitalis in less than four hours. The patient was very soon asleep. He slept with but very little interruption for nearly ten hours, and on awaking thought he was dying.

"I then," says the patient, "took a little beef juice, and after a little a glass of water, and settled myself calmly in bed to die—and wished to die decently and with propriety; but, instead of dying, I merely went to sleep, and when I awoke again, about daylight, felt perfectly well, my fever all gone."

Remarking upon this case, Dr. Wooster says:—

"This case *alone* determines, in our estimation, the innocuousness of digitalis in enormous doses, *when administered to patients in the last stage of delirium tremens, and also its rapidly curative effect in this frequently fatal affection.* We by no means desire to intimate that because one and a half ounces of digitalis cured a case of delirium tremens, that the same amount would not kill a case of fever or other disease."

This is not a new method of treating delirium tremens, neither does Dr. Wooster claim it as such. So far as we now remember, it—digitalis—was first used by Dr. Glass, of Wirtemberg, who claimed remarkable success with the remedy. He used the infusion, and gave it with reference to its specific effects without regard to quantity. Later, Dr. Jones, of Jersey, England, reported great success with this remedy, in very large doses in delirium tremens. He gave as much as half of an ounce, and even an ounce at a dose, of the tincture, and repeated as he thought circumstances justified, which were, as it seems to us, in view of the doses, frightfully often.

In the *American Medical Times* for December 1st. 1860, Dr. Randolph Page reports two cases thus treated successfully. To the first patient he gave the officinal tinc. in *two-drachm* doses, and repeated every three hours, until five doses (one and one-fourth ounces in all) had been taken, when the patient went to sleep. Twelve hours later, three drachms at one dose were administered, after which the patient required but little or no further treatment.

Since writing the above, we have observed two other authorities who have highly recommended the digitalis in delirium tremens. Dr. G. M. Jones, in the *Med. Times and Gaz.* for September 29th, 1860, relates a singular circumstance. He says that in 1848, for a case of delirium tremens, he prescribed chloric ether with tincture of opium, and was horrified when he found *tincture of digitalis* had been administered instead; but pleasure succeeded to horror when he found that the patient, whom he expected, even under appropriate treatment, would die, was rapidly recovering under the mistake. Since that he has used the digitalis in all cases of delirium tremens. He says:—

"As to the dose, experience has taught me that the best dose is *half an ounce* of the tincture, given in a little water. In some few cases, this one dose is enough; but generally, a second dose is required four hours after the first. In some cases, but very seldom, a third dose is called for; but this hardly ever need exceed two drachms."

It is probable that Dr. Jones was the first to advise this remedy in this disease.

In the *St. Joseph Med. and Surg. Journal*, Dr. G. C. Catlett speaks very highly of digitalis in delirium tremens. This was in 1860. He commences with the tincture in *teaspoonful doses*, and repeats every *half hour*. When improvement is decided, he lengthens the interval. There may be others who have recommended the remedy, in the disease under consideration, and also different methods of using; but we have not now the time for further research. Enough has been said to induce our readers to give the digitalis a trial, before seeing a patient die with delirium tremens.

Nearly two years ago, and before we had observed any recommendation of digitalis in *mania*

a potu, or account of such use of the remedy under consideration, we suggested, upon what we deemed sound theoretical principles, the use of the *veratrum viride* in *mania a potu*. Unfortunate for our desire to put this remedy to the test, but honorable to the sobriety and morality of our patrons, we must say, we have never seen a case of the disease under consideration. The veratrum viride and the digitalis are not dissimilar in their therapeutic effects, and it is still possible that our theoretical suggestion may not be wide of the mark.

With digitalis, in the cases referred to, it seems to us that the doses are alarmingly large; they would prove the death of a well person, it is quite possible. True, the results are satisfactory; but suppose the patients had died, who would have known whether they died of the disease or the remedy? With a remedy so variable in strength as the tincture of digitalis, we cannot resist the temptation to suggest that the remedy be commenced in more moderate doses than four drachms, and then increased with reference to its specific effects, unless decided improvement sooner takes place.

EXTRA-UTERINE PREGNANCY.

In the *Chicago Medical Examiner* for September, Dr. E. P. Cook reports a very interesting case of extra-uterine pregnancy. The patient had previously borne two children, and supposed herself to be in her third pregnancy. Cessation of menses, morning sickness, swelling, soreness and secretion in breasts, were all present, as in ordinary pregnancy. The patient carried the fœtus for about four years, and without the development of marked symptoms or changes "after the expiration of nine months, until more than three years had passed, when the lining membrane of the sac took upon itself a secretive function, and gave rise to a state of things resembling very much a case of ovarian dropsy, and repeated tappings were necessary."

After having been tapped five times, and always with marked temporary improvement, an operation for a radical cure was attempted. The fœtus was removed by gastrotomy, and weighed five pounds, and was in a perfect state of preservation, excepting scalp and bones of the cranium. After several weeks of suffering, and uncertainty as to the result, the patient recovered perfectly. It is but proper to observe that, because of firm adhesions, the sac was not removed. This now can be easily felt through the walls of the abdomen, "about the size of the closed fist, firmly fixed just below the umbilicus, extending down to the left iliac fossa, the greater bulk to the left of the mesian line."

OPIUM AS AN ANAPHRODISIAC.

In the *Chicago Medical Examiner* for September, Dr. B. Woodward has an article upon opium and its properties. He regards opium as a decided anaphrodisiac. Both in men and women, who are in the daily habit of using opium, he found, on inquiry, that the sexual desire was nearly extinct. This accords with our own observation of this remedy. This is not a new idea, and yet many have denied to opium any influence over the sexual system. Though opium has been regarded as a lessener of all the secretions, Dr. Woodward thinks it is a decided diuretic. After repeated trials upon himself and others, he found the urine increased full one-third in twenty-four hours, under one-third of a grain of sulphate of morphia, repeated three or four times a day, while its specific gravity was decreased.

In the six persons experimented upon, this result was uniform in all but one—in this one there was no perceptible increase in quantity of urine, but a marked lessening of specific gravity. The direct effects of opium were not as marked as when the alkaloids—the sulphate or muriate of morphia—were used.

KEROSOLENE AS AN ANÆSTHETIC.

In the *Chicago Medical Examiner* for September, Dr. F. W. Reilly details a few experiments with this agent. His experiments were made upon rabbits, and though death was produced in two cases, anæsthesia was produced in none.

In former numbers of our *Summary*, we have given the experience of Dr. H. J. Bigelow, of Boston, with this agent, as well as that of others who have put its properties to the test of experience. The results of Dr. Reilly do not correspond with those of Dr. Bigelow. In the *American Journal of Pharmacy* for September, Mr. Edward Parrish has an article upon kerosolene. He makes a remark that may account for the discrepancy. He says:—

"In view of its use in medicine, the fact of the great uncertainty of its composition, its being a mixture of different and undetermined proximate constituents, must interfere with its general adoption and recognition." He further observes, "My friend, Dr. Thomas George Morton, gave it in four or five instances to full-grown cats; in no

case did it appear completely to destroy sensibility, though it seemed to deaden pain, and generally, if the sponge was applied about fifteen minutes to the animal, convulsions and violent twitchings resulted."

This corresponds with the observation of Dr. Reilly. Convulsions and death occurring short of anæsthesia, render it less safe than chloroform, even while it is far less efficacious for all purposes for which anæsthetics are used. Though we have never put it on trial, from all we can learn of it we cannot help thinking it will be found nearly or quite worthless in medicine.

SPERMATORRHŒA SUCCESSFULLY TREATED WITH ACONITE.

In the *Cincinnati Medical and Surgical News* for August, Dr. J. J. Kimberlin has an article upon spermatorrhœa, and gives a case illustrating his treatment. He believes spermatorrhœa to be the result of "an excessive sensibility of all the urino-seminal vessels, especially of the prostatic urethra," and directs his treatment accordingly. The following is his prescription :—

"Two parts of the solid extract of aconite, and one of hemlock, were broken down with water to the consistency of cream. Of this an ungent was formed by adding lard in sufficient quantity, with which the perineum was well anointed, three times per day for over a week, in conjunction with a regular course of salines to keep the bowels soluble. At the expiration of the time mentioned, my patient returned much elated with the success of the course of treatment."

This treatment was continued for a month longer, and the doctor says the cure was perfect.

INHALATION OF ETHER IN PUERPERAL CONVULSIONS.

Before the *Boston Society for Medical Improvement*, as per report in the *Boston Medical and Surgical Journal* for September 12th, the subject of the inhalation of ether in puerperal convulsions was under discussion. Drs. Storer, Tyler, and Dalton expressed themselves decidedly in favor of its use in such cases. Dr. J. Bigelow thought it was probable that ether would be found only valuable in the hysterical variety of this disease. Dr. Storer said, he "had seen very decided effects from ether in this affection, in cases where the urine contained large quantities of albumen, and in which there was no evidence of hysteria."

We have used chloroform in almost every form of convulsions, puerperal, hysterical, and epileptiform, for about six years, and it has never failed in bringing prompt and perfect relief, which was often permanent. Ether we have never used in such cases. The sedative character of chloroform would determine our selection of this agent in preference to ether, which last we should suppose might be objectionable in some cases. We do not regard chloroform as objectionable in any case—if there are cases to which it will not bring relief, but little time need be lost in giving it a trial. We have never found it necessary to administer the remedy to anæsthesia.

By a singular coincidence, at this juncture, our attention was attracted from our writing to our son, a boy ten years of age, who has been but twenty-four hours ill with diphtheria, and found him in convulsions. Almost instantly we had a handkerchief, wet with chloroform, to his face, and a few inspirations were sufficient to relax all spasm and restore consciousness.

We at one time attended a case of dysmenorrhœa in an unmarried lady, aged about twenty-two years, of apparent robust health, but of sedentary habits. At each monthly period, trismus and general rigidity of the muscular system would occur, with insensibility, etc. A few breaths of chloroform would invariably unlock the jaws, and relax the iron-like rigidity of the muscular system. Occasionally these symptoms would recur a dozen times or more during the period, but at each time was as promptly relieved by the inhalation of chloroform. Our experience has been such with chloroform in convulsions, that we have resorted to it almost indiscriminately. So far, fortunately, it has not disappointed us. Perhaps ether will do as well, but our faith is not sufficiently strong to induce the change.

NEUTRAL SALTS IN DYSENTERY.

A correspondent of the *Boston Med. and Surg. Journal* for September twelfth, over the initials of C. E. B., has a few remarks upon this subject. Those of our readers, who have been such for several years, know that we have been an earnest advocate of the use of epsom salts, in connection with elixir vitriol and sulphate of morphine, in dysentery. Since we commenced the use of these remedies, we have not lost a case of the disease under consideration.

Dr. C. E. B. thinks there is an equally efficient and pleasant preparation—we hope so, certainly. The doctor says:—

"The treatment of dysentery in its earlier stages by neutral salts, has certainly very great success. But why should one select such a disgusting salt as sulphate of magnesia, when there are others equally as good and very palatable? Why force a child to swallow an offensive remedy, when a pleasant one can be had? A scruple of bitartrate of potash to an ounce of syrup of orange peel or Tolu has the advantage of being a medicine that 'children cry for,' and not on account of. It has the advantage also of being a salt of an organic acid."

IN-GROWING TOE-NAIL.

In-growing toe-nail is by no means a rare trouble; and, though not destructive to life, it is extremely painful and annoying. The old method of treatment by splitting the nail in two and then tearing each off respectively, was an extremely painful method of cure; and yet one we have frequently seen performed by an eminent surgeon and professor.

In the *Boston Med. and Surg. Journal* for September 19th, one of its editors copies a new method of treating this troublesome affection, from the *Gazette des Hôpitaux*, with remarks. The author of the paper, M. Wahn, being sorely afflicted himself, decided to employ the *perchlorure de fer*. He says:—

"I obtained some in a powdered form, and insinuated it as deeply as possible between the free edge of the nail and the ulcer. I felt almost immediately a moderate sensation of pain, accompanied by a feeling of constriction and a strong burning sensation. A quarter of an hour after, I attempted to walk, and, to my great satisfaction, I found I could bear my weight on my foot throughout its entire length without the least pain; a thing which I had not done before for many months. The following day I carefully examined the diseased parts, and found them mummified and as hard as wood. I applied a fresh quantity of *perchlorure de fer*, which I allowed to remain for a quarter of an hour; but I have reason to believe this application was useless, as the mummification was complete by the first process."

Within the last two years we have noticed at least four methods of treating this trouble, besides the one above given, all of which are described as nearly painless. To many of our readers it may be interesting to subjoin these as briefly as possible; as, so far as we know, they are not taught in our text-books.

In the *New York Monthly Review* for August, 1859, Prof. Mack, of Buffalo, in his Review of Parisian Medicine and Surgery, says:—

"In-growing toe-nail is removed by M. Gourut by the following process: Short strips of adhesive plaster are placed on one another, so as to form a kind of brim; two such fasciculi are made, and placed a little in front and a little behind the morbidly-growing nail. Into the groove thus artificially made, and which just occupies the root of the nail, semi-fluid Vienna paste is put. After a few minutes, a black eschar is formed, properly hemmed and limited by the adhesive plaster. The paste is now quickly taken off; and in a few days the nail comes off, without pain, by the gentlest traction."

In the *Boston Medical and Surgical Journal* for October, 1859, Dr. H. B. Wilson, of Boonsborough, gives what he calls a sure and painless method of treatment. He says:—

"'My plan is, first to take a perfectly sharp scalpel, and beginning at the end of the nail, on the sore side, gradually and slowly divide about *one-fourth* of the nail from the end to the root.' * * * 'The next thing to be done is, not to dissect out the nail, or forcibly draw it out by the root, but to introduce a *very* little raw cotton under the edge of the smaller portion, or between the two edges where it has been split, as far down as the root; then bind the toe up in a slippery-elm poultice, in order to reduce the inflammation. In another day, the cotton can be pushed still farther under the nail, and the nail itself will begin to let go its connections and become loose. On the second day, or at most, the third, the fourth part and offending portion *will come out of itself*, or can be gently removed *without the slightest pain*, and the toe will then get well without any further treatment.' Since copying the above, we have tried this plan of cure in one very bad case, with results quite satisfactory."

In the journal just referred to, for December 15th, 1859, the editor has the following for cases of moderate severity:—

"A piece of soft felt, such as is used by pianoforte makers, about half an inch thick, is cut into a wedge shape, and inserted between the great toe and the second, the point forward. The size of the wedge must be regulated by the circumstances of the case, the object being to separate the toes, so as to remove the pressure of the second toe against the internal angle of the great toe-nail, care being taken that the toes are not pushed too far apart. The nail should be allowed to grow to the end of the toe, and the internal corner must not be pared away, as is often done."

In the same journal quoted from above, for December 29th, 1859:—

"Dr. N. Gilman gives a new plan of treating in-growing nail, for which he claims prompt and satisfactory results. The treatment which he advises he says he has put to the test for twenty years without failure. It is simply to cauterize

the part with hot tallow. He says: 'The patient on whom I first tried this plan was a young lady who had been unable to put on a shoe for several months, and decidedly the worst case that I have ever seen. The disease had been of long standing. The edge of the nail was deeply undermined, the granulations formed a high ridge, partly covered with skin, and pus constantly oozed from the root of the nail. The whole toe was swollen, and extremely tender and painful. My mode of proceeding was this: I put a very small piece of tallow in a spoon, and heated it over a lamp until it became very hot, and dropped two or three drops between the nail and the granulations. The effect was almost magical. Pain and tenderness were at once relieved, and in a few days the granulations were all gone, the diseased parts dry and destitute of feeling, and the edge of the nail exposed so as to admit of being pared away without any inconvenience. The cure was complete, and the trouble never returned. I have tried this plan repeatedly since, with the same satisfactory results.'"

In the Reporter for October 6th, 1860, Dr. H. M. Clarkson reports a bad case of in-growing nail, at once relieved and soon cured by one application of this simple remedy, as recommended by Dr. Gilman.

Dr. B. Weber, in the *Lancet and Observer* for November, 1860, after referring to this plan of cure, subjoins his own method, which, he says, will, in numberless instances, make all others superfluous. He says:—

"To attain my object, I made use of the following composition:—

℞.—Cortic. querci, ℥ss;
Gallarum turcicarum, ℥j.

Conscisse coque in aq. communt, ℥x, Ad remanentiam, ℥vi, Colatura addatur Argenti nitrici fusi, ℈j–℥j.

Acet. saturn, ℥ij. M.

D. S. Embrocatio.

"With this mixture the sick toe is to be moistened all over, and as much as possible of the liquid dropped into the fissure between the nail and flesh, and then the toe to be bandaged with a strip of linen about one and a half inches wide and eight inches long. After the end coming next to the nail has been saturated thoroughly with the liquid, the balance of the strip is wrapped around the toe. The moistening of the inner end of the strip has to be repeated through the day four, or six, or ten times, and to be continued until a cure is effected. Generally the application causes no particular pain; if, though, there should be much sensitiveness, from six to twelve grains of morphine might be added.

"Soon after the application of this remedy the swelling of the toe subsides, the excrescences, the proud flesh shrink, get black, as also the whole toe; the nail gets brown, soft, brittle, loses its stiffness, and ceases to press and dig into the flesh; the skin peals off, and out of the matrix a new, well-formed nail will be developed."

From the above methods of cure, we think our readers can make a selection that will meet any case they may have in hand without necessitating a resort to the barbarous method of evulsion.

TUBERCLE—PATHOLOGY OF.

A week or two ago, we referred to a paper upon *Phthisis Pulmonalis*, in the *St. Louis Med. and Surg. Journal* for September, by C. R. S. Curtis. We wish again to allude to it, because of its author's peculiar pathological views. He does not believe the blood to be in fault in *tuberculosis*. We cannot quote his argument, but subjoin the following:—

"And in addition to these circumstances, there is one other consideration, of the greatest importance, which must not be overlooked, and which is as applicable to tuberculosis as to cancer; and that is, that the *blood has no direct formative power within itself*, and consequently cannot directly form even the simplest organ of the body—its purpose in this respect being to distribute through the molecular structure of organs the material suitable for their growth and development, which material is selected from the mass by the molecules, (for the molecules have a discriminating power of selecting from the blood such material as is best suited for their growth and development, and rejecting that which is unsuited,) and by them so elaborated as to enter into the formation or subserve the function of the organs which they represent. Bearing upon this point, and in opposition to the doctrine of 'free-cell development,' Prof. Virchow most ably remarks: 'Even in pathology, we can now go so far as to establish, as a general principle, *that no development of any kind begins* de novo, *and consequently as to reject the theory of equivocal* (spontaneous) *generation just as much in the history of the development of individual parts as we do in that of entire organisms.* Just as little as we can now admit that a tænia can arise out of saburral mucus, or that out of the residue of the decomposition of animal or vegetable matter an infusorial animalcule, a fungus, or an alga, can be formed; equally little are we disposed to concede, either in physiological or pathological histology, that a new cell can build itself up out of any non-cellular substance. Where a cell arises, there a cell must have previously existed (*omnis cellula e cellula,*) just as an animal can spring only from an animal—a plant only from a plant.' Consequently, we cannot regard cancer or tubercle as the direct result of a depraved condition of the blood without either claiming for the blood a direct formative power, or denying to the tissues their property of discriminative selection, either of which positions would be contrary to the known and acknowledged principles of physiology.

"That the material of which these morbid pro-

ducts are formed is derived from the blood, we would not be understood to deny; but we claim that such material is derived from normal healthy blood, and not blood in a depraved condition. The same blood, for instance, which supplies to an abnormal malignant growth the material for its development, supplies to all the organs of the body healthy material for growth and function. In other words, this morbid condition of vitality, having once become established in a given organ or part, possesses in its ultimate structure the same power of discriminating and selecting from the blood the matter they require, as do the molecular structures of healthy tissues. The same condition is observed in the vegetable world. From some cause an excrescence begins to form on a tree or plant. This unnatural action having once been established, for years, or perhaps during the whole life of the tree or plant, this morbid growth derives from the healthy sap the material for its increase, just as the body and branches derive their support from the same source."

From the above, and the contents of his paper in general, he deduces the following conclusions:

"We will now proceed to consider where the first link in the chain of morbid action began. We have sought for it in the blood; but the microscope and the laboratory have not found it there. Neither can we regard it as the result of inflammatory action. We have traced it to the ultimate cell structure. Here is its first manifestation while all other parts remain normal and healthy. Here, then, in the ultimate cells the first perverted action is found—a molecular and cell growth, whose function and development is abnormal and degenerative, and which has a power of producing in other tissues the same morbid peculiarities that characterize itself. But whence originated the mother cell of this perverted mass? It could not have sprung from the blood, because the blood has no direct formative power—neither could it have had a spontaneous development: it must have been derived from a once normal cell; but, in order for such a derivation, the normal cell must have undergone a transformation so as to become abnormal. And we can account for it in no other way than by regarding it as originating in some peculiar revolution that has taken place in a parent cell, by which its function has been perverted and its physical and vital tendencies changed. Such a revolution could not have been produced excepting through a disturbance of the just equilibrium existing between the vital and chemical forces acting within it, and by which its functional and reproductive revolutions are governed. This change in the character and products of a once normal cell having taken place, other cells resembling it in every particular, the offspring of the first, would necessarily be produced in a very short time, on the principle that 'like produces like.' And, in accordance with the law of molecular motion, these abnormal cells would have the power of imparting their own motion to other cells with which they might be in contact. Thus we can readily perceive how this morbid action may rapidly extend and increase locally. And by the unnatural and depraved products of perverted function being absorbed into the circulation, 'the life of all his blood is touched corruptibly,' and the morbid material becomes diffused through all the tissues of the body, and thereby sooner or later eventuate in death."

NEW PROCEDURE FOR THE LIGATURE OF THE SUPERFICIAL PALMAR ARCH.

"All surgeons are aware that the gravity of the wounds of this artery is entirely out of proportion with its size. The difficulty of checking the hemorrhage arises, on the one hand, from the fact that blood is supplied in almost equal quantities by the radial and ulnar arteries, and on the other, from the number of collateral vessels given off in so limited a space. Hence it is almost impossible for a solid coagulum to form in the divided extremities of the artery. The superficial situation of the arch, in a region so exposed as the palm of the hand, accounts for the frequency of these injuries. In general, pressure on the site of the wound and on the principal arteries leading to the hand is at first resorted to; but the abundance of secondary hemorrhage soon compels the surgeon to secure the radial, ulnar, or even the brachial arteries, a series of hazardous operations which might be avoided, were it possible to apply a ligature directly upon the extremities of the open vessel. This precept is, however, seldom complied with, on account of the loose description given by anatomists of the exact situation of the superficial palmar arch.

"Dr. E. Bœkel, Fellow of the University of Strasburg, has recently published, in the local *Medical Gazette*, some new indications which may guide the operator in his search for this artery, and permit him to secure it without unnecessarily extensive incisions.

"'Place the thumb,' says Dr. Bœkel, 'in the greatest possible abduction, and draw a line from its ulnar edge across the palm of the hand. In front of this, which may be denominated the guiding-line, draw a second in a parallel direction, at a distance of a third of an inch nearer to the fingers, or more correctly at an equal distance between the first line and the middle cutaneous fold of the palm; this is the precise position of the superficial arch, and if the skin and palmar fascia are divided here, the artery will be at once exposed, and found reposing on a layer of fatty tissue which separates it from the nerves and tendons. No apprehension of wounding these need therefore be entertained.

"'It will perhaps be alleged that no fixed rules can apply to an artery so irregular as the palmar arch; but it must not be forgotten that the anomalies alluded to refer less to the exact situation of the vessel than to the dimensions of its supplying branches. I have performed the ligature above twenty times on the dead subject, guided

by these rules, and have never once failed in alighting on the artery in the exact position described.

"'An accurate knowledge of this anatomical detail has another advantage quite as great as that of giving increased facility in finding the artery, viz., it supplies us with the means of avoiding it. Phlegmonous inflammation beneath the palmar fascia, at the same depth as the arch, frequently requires incision, which is never extended toward the wrist without a certain amount of hesitation. The indications I have mentioned will permit the surgeon to use the knife with more boldness, and at the same time with greater safety, and they have already done me good service for this purpose.'"—*Journal of Practical Medicine and Surgery.*

PEPSIN IN INDIGESTION OF NEW-BORN CHILDREN.

The *Moniteur des Hôpitaux* of July last contains an article by M. Toulin, who had to treat a new-born child laboring under great weakness, vomiting, diarrhœa, etc. As it was evident, from the constant vomiting, that the child did not properly digest the milk, M. Toulin had recourse to pepsin, which was given in two-grain doses mixed with sugar-water. The mother, at the same time, made her milk flow into the child's mouth, as he was too weak to suck. On the third day the diarrhœa had ceased, and the vomiting was quite controlled on the twelfth day. The child is now two years old, and the picture of health. Pepsin has also been found useful with children who take large quantities of milk from the breast and regularly reject a portion of it.—*Lancet.*

ACUTE GLANDERS IN A PREGNANT WOMAN, RESULTING IN DEATH.

M. Maugeret, of Tours, in France, relates, in a late number of the *Gazette des Hôpitaux*, (September 24th,) a most puzzling case where death was eventually found to be the result of glanders. The patient was thirty-nine years of age, a rag-dealer, and seven months pregnant. She lived in a most filthy room, surrounded by bones, rags, and offal of all kinds. The family kept a small, sickly, jaded horse, afterward known to be suffering from glanders, and which was habitually tended by the patient, drank from the same vessel as the inmates, and was thought to be affected with paralysis of the legs. The woman, after long draughts of cold water, when heated, was attacked with a kind of intermittent fever, this masking the pneumonia, which was soon discovered. Several days afterward she had severe pain in the legs, pustules about the nose and forehead, and discharge from the nostrils. The eruption soon invaded the whole face, and descended to the shoulders; the nose swelled enormously, the discharge becoming thick and purulent; and, as the glands of the neck swelled considerably, the head became hideously large and repulsive. Delirium set in, scorbutic patches appeared on the chest and legs, and dark blood exuded from the gums. The face swelled more and more, and became covered with crusts and blisters; the discharge from the nose increased and was incessant; the eyes, enormously tumefied, also oozed with purulent matter; the respiration was anxious; the tongue black, thick, and dry; the stools involuntary. The agitation and cries of the patient were fearful, and she could hardly swallow a drop of liquid. The whole body was soon covered with a fetid perspiration, and a great number of tumors, and the breath was so horrible that none but members of the family could be found to attend to the unhappy woman. In this fearful state, she began to feel child-bearing pains, and she had enough strength left to ask for her midwife. The latter had the courage to answer the sad appeal, and the patient gave birth to a living, though hardly viable child, which lived twenty-four hours—a time just sufficient to allow it to be buried with its mother.—*Lancet.*

FOREIGN BODY IN THE LARYNX—REMOVAL.

Dr. L. B. Bostford, Surgeon of the Marine Hospital of St. Johns, New Brunswick, communicates the following case to the *American Medical Monthly*:—

"A sailor was admitted on the sixth instant into the Marine Hospital, where I saw him about three hours after the accident occurred. He had been using a large-sized tailor's needle, threaded, and while holding it in his mouth and coughing, the needle entered the throat. Attempts were made to remove it before he came to the hospital, without success.

"When I saw him, the thread, a linen one, extended about three inches beyond the mouth; looking into the fauces, no needle could be seen. To ascertain the whereabouts of the needle, I took a gum catheter, cut off the end, passed a thread through, attached it to the thread connected with the needle, and passed the catheter in until it evidently followed the thread down to the eye of the needle. The catheter passed down about seven inches, and violent coughing was induced, such as follows the application of caustic solutions with the sponge.

"The probang was next passed into the œsophagus, but produced no disturbance. Slight force applied to the thread caused the man to cough. I was assisted by Dr. Hamilton, of this city. Our diagnosis was, 'needle in the trachea, point upward,' and we concluded upon opening the trachea and extracting.

"Upon further examination of the throat, and endeavoring to ascertain where pain might show the probable position, the man pointed to the neighborhood of the cricoid cartilage, and suddenly exclaimed, 'I think I feel it.' Pressing upon the space between the cartilages, I recognized what appeared to be the point of a foreign substance. Cutting down through the integuments into the crico-thyroid space, the point of the needle was made bare, and seizing it with a

forceps, the needle was drawn out, the thread disappearing down the throat, as it followed the needle through the opening.

"The peculiarities of the case were: 1st. The absence of cough, unless the thread was pulled. 2d. The power of speaking, without inducing spasm of the epiglottis.

"There can be no doubt but that the needle was in the trachea, and it could not have penetrated through its posterior wall first from the œsophagus, because the probang caused not the slightest uneasiness, which it must have done by coming in contact with the needle, which was about two inches long."

REVIEWS AND BOOK NOTICES.

Placenta Prævia; its History and Treatment. By William Read, M.D., of Boston, Member of the Massachusetts Medical Society, etc. etc. Philadelphia: J. B. Lippincott & Co., 1861.

This volume forms the twenty-third of the Library of Practical Medicine, published by order of the Massachusetts Medical Society for the use of its Fellows. Upon the subject of which it treats it is entirely exhaustive, giving in its 340 pages a condensation of all that is now known in relation to this rare but important and difficult complication of parturition. The work was begun for the author's own information, at a time when there was much doubt upon many points relating to the subject. As the investigation proceeded, materials accumulated, and it was found that, though the labors of Drs. Simpson, Trask, and Barnes had thrown much light upon the subject, yet they had given rise to many questions about which there might be great difference of opinion. Copious notes and references are given throughout the work, so that the reader can verify every quotation made. And thus the full blaze of all the past researches and opinions is thrown upon the solution of some of the questions and differences. The style in which the work is written is attractive, and the statistics, dry as they usually are to the ordinary reader, are yet thrown together in such varied form as to give zest to the perusal. The work has received the universal commendation of the medical press, and cannot fail to be a valuable addition to standard medical literature.

The conclusions to which the author arrives are thus expressed:—

"1st. The danger to the mother in Placenta Prævia *increases* as the period, at which the labor comes on, approaches the full term. A result rather to be expected from the increased capacity of the uterine vessels, as pregnancy advanced to its termination. It is therefore better to terminate the labor, after it has really begun, as soon as compatible with the safety of the patient, than to endeavor to conduct the pregnancy to its full term.

"2d. The danger to the mother is less when the os uteri is completely covered, than when a portion only is involved in the attachment of the placenta; and least of all, where the attachment becomes nearly or quite central with reference to the os. Under these last conditions there is a strong probability, if the contractions are vigorous enough, that the placenta will be thrown off and expelled into the vagina, and the hemorrhage be checked.

"3d. The *condition* of the mother, is a much more important element in making a prognosis of the case, than the amount of blood lost; some constitutions being very much less susceptible to the effect of depletion, and capable of sustaining a greater amount of hemorrhage without being unfavorably affected, than others. The condition of the mother then, should be most carefully watched, and the appearance of any symptoms indicating debility, or a tendency to collapse, should be the signal for the adoption of such remedies, or such a course as will the most speedily and safely insure the delivery of the child. And they should be put into effect without any delay, always bearing in mind the fact, that operations which are perfectly safe to the mother, when her vital power is comparatively undiminished and unimpaired, become almost certainly fatal, if performed when she has become exhausted by hemorrhage and suffering.

"4th. In those cases where the pains are vigorous, and show a disposition to be permanent, (the head presenting, the os in good condition, and the strength not materially impaired,) *Rupturing the membranes* by letting off the waters, and bringing the child's head down upon the os, will, in most instances, be enough to check the bleeding, and place the mother in a safe condition. When, however, a want of tonic power is manifested, or it is probable that resort must be had to forced delivery, the discharge of the waters in this way will only increase the difficulty of the operation, and the danger to the mother.

"5th. The danger to the mother is materially increased by artificial delivery. But the same statistics which show this result, also make it evident that this increased fatality is owing *not so much to the operation itself*, as to the enfeebled and exhausted condition of the mother at the time; and that, with a favorable condition on the part of the mother, there is no more danger in resorting to it in Placenta Prævia, than in ordinary cases of difficult labor

"6th. The effect of artificial delivery to endanger the life of the mother in Placenta Prævia, being therefore almost directly proportionate to the degree of exhaustion under which she labors, it should be the aim of the practitioner to perform this operation, before such a state is reached; always bearing in mind the remark of Dr. Churchill, that 'it is peculiar to midwifery operations that they form an ascending series, increasing in gravity from the simplest to the most severe—no two being equal; and therefore, in considering the suitability or practicability of any one, we do so with the knowledge that if the one we prefer,

do not succeed, we must have recourse to another more severe and more dangerous.'

"7th. If from the progresss of the case, or the conditions of the labor, a resort to artificial delivery must finally be had, it should not be delayed an instant beyond the time, when the dilatation, or dilatability of the os uteri, permits the introduction of the hand into the uterus: the danger to the mother from forced delivery, being directly proportionate to the degree of exhaustion under which she labors. (See art. 3d, 5th, 6th.)

"8th. When from the rapidly failing condition of the mother, or the presence of any cause rendering artificial delivery impossible, a resort to the foregoing is forbidden, the placenta should be wholly separated from the uterus, and such remedies made use of (see Transfusion, p. 326,) as will recruit the strength of the mother, until reaction having been established, she can be delivered in whatever way may be deemed best.

"9th. The tampon may be used advantageously in all those cases, where, with an amount of flooding sufficient to materially affect the constitution of the mother, the os uteri remains so rigid that it is impossible to perform artificial delivery. But, while under these circumstances, it is important to gain time for the dilatation of the os, and, at the same time, prevent the hemorrhage from too speedily exhausting the mother; under an opposite state of things a resort to the tampon, by inducing this temporizing policy, will often cause a loss of valuable time, and in this way make just the difference between a safe and a fatal issue. As the effect of this application, is not only to check the hemorrhage, but also to excite labor-pains and dilatation of the os uteri, it is totally forbidden, in all cases where either or both of these results may not be desired.

"10th. The effect of ergot being of a twofold nature, according to the condition of the system, (ecbolic or parturient when the nervous energy is undiminished, and stimulant when there is a want of this,) it should not be administered, when there is a probable necessity of terminating the labor by an operation, unless at such an interval, that the effect of it is either exhausted, or will not come on until after the operation is finished, or the condition of the mother is such that it wil act merely as a stimulant.

"11th. In cases where the exhaustion is excessive, and version is the only alternative, after the feet have been brought down, the body of the child should be left undelivered, until the uterus has been roused to contract, and a firm condensation of its walls has been secured; or at least, it should be withdrawn so slowly, as to prevent the evil consequences which sometimes follow too sudden delivery."

A Loadstone which Belonged to Benjamin Franklin.—At a sale in London of the effects of the late Mr. Quekett, the microscopist, was a loadstone which had belonged to Franklin. It was incased in brass, on which was the inscription, "Benjamin Franklin, Boston, N. E., 1779."

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, JANUARY 11, 1862.

SANITARY ARRANGEMENTS IN NEW YORK.

From an excellent address, read before the New York Sanitary Association recently, by Dr John H. Griscom, we learn some facts relative to the sanitary condition and health arrangements of New York City, which are deserving of special notice

The "cognizance of *all* matters affecting the public health of the city is confided by the charter to that department called the City Inspector's Department. By statute law, there are two other organizations for the same purpose. 1st. A Board of Health, composed of the Mayor, Aldermen, and Councilmen, (which has had no meeting for nearly a year.) 2d. A body called Commissioners of Health, composed of six persons. In the Health departments there are 183 individuals. Of the Commissioners of Health, *one* is a distinguished surgeon, one a retail apothecary, and the other, the Health officer, resides on Staten Island. Among the members of the Board of Health there is not *one* medical man, and in the City Inspector's Department there is but one laying any claim to a knowledge of medical science; and he is only a clerk, without any executive functions. Among the subordinates of the City Inspector are twenty-two Health wardens, not one of whom, in 1859, made any pretensions to a knowledge of medical or sanitary science. In 1861, their assistants were of the same stamp, *par nobile fratrum.*"

The sanitary interests of the city are therefore entirely under the control of civilians. And not only is the medical profession thus ignored in a matter which of right should come under their supervision, but even a knowledge of the common principles of sanitary science is not required in the guardians of the public health. We venture the statement, that a like anomaly is not found in the history of any other city of the Union, nor of the world. The expense of maintaining these organizations amounted, in 1860, to $478,620 72, or, independent of the amount paid for street-cleaning, $153,249 35; and the results are exhibited in the comparative sanitary statistics of the four great cities of the United States. In 1850, the deaths in New York averaged one in 33·52; in Philadelphia, one in 37·84; in Boston the same; in Baltimore, one in 36·19. In 1857, the mortality in New York increased to one in 27·15; in Philadelphia it diminished to one in 44·5; in Boston, to one in 39·88; in Baltimore,

one in 36·19. These figures prove that New York is not only less healthy than either of the other cities mentioned, but that in that year it reached almost the same ratio of mortality that London exhibited nearly two hundred years ago. But London, under a thorough system of hygienic supervision, has vastly improved, and 1 to 40 is the ratio of the present day. The sanitary interests of that city are committed to the care of medical men—men who have devoted their lives to the subject of sanitary science. So in Boston, so in Philadelphia; but in New York, for the last twenty years, the great interests of the public health have been confided to the charge of party politicians, ignorant of the causes of disease, or the means of their prevention; and, as a natural result, the ratio of mortality to the population has been rapidly on the increase.

And, as if to add "confirmation strong as holy writ" to these statements, the annual report of the Board of Police Commissioners for 1861 exhibits the astounding fact that nearly one-half of the entire population of the city resides in tenement-houses, containing four families and upwards. In regard to these houses, the Commissioners allege that in their erection every "consideration of health or comfort, and of safety, was sacrificed to provide room for the largest number of inmates, and that the sacrifice of life from deficient ventilation, defective drainage, and putrid gases, could not be over-estimated, because these sources of disease affect the atmosphere of the whole city.

"It is the opinion of physicians, that the minimum quantity of air which should be allotted to each person in a bedroom is 500 cubic feet, or a cube of eight feet; and that if the space be reduced, the generation of disease is inevitable.

"By reference to the table referred to, it will be seen that there are in the City of New York—

	Houses.	Inmates.
Having from 100 to 300 cubic feet to each person . . .	1900	63,337
Having from 300 to 400 cubic feet to each person . . .	2991	103,371
Having from 400 to 500 cubic feet to each person . . .	2517	79,462
Cellar population averages 462	——	21,119
Total		267,289

"Tenement-houses, because of the large number of families resident in them, are peculiarly liable to destruction from fires, and public attention has been drawn to the necessity of providing proper means of escape for the inmates.

"The following is the result of the examination of the Sanitary Police:—

	Houses.	Inmates.
Means of escape defective .	3791	126,582
Means of escape good . . .	8419	256,305

From the same report, we also learn that there are 167 slaughter-houses in the city, at which have been killed 785,616 head of cattle and small stock. These buildings are scattered throughout the city, and are fruitful sources of disease. Then, again, there are also hide-houses, offal, and bone-boiling establishments within the lines of dense population. A recommendation that these should be removed, is evidence that they are not conducive to the health of the city.

These are startling considerations, and they indicate with unmistakable certainty the necessity of complete and thorough reform in the sanitary regulations of the city. The politicians should be "weeded out." The Augean stable should be cleansed. Some Hercules in sanitary science, like the author of the pamphlet before us, should be commissioned to drive out those pestiferous political hacks, and substitute in their place the legitimate patrons of medical and sanitary science. For this purpose, legislation is undoubtedly needed, both State and charter, and all who value public health should join heart and soul in the work. Here, we may add, is a legitimate field for a sanitary commission. Here are nearly half a million souls, among whom the seeds of disease and death are constantly being planted by the neglect of proper sanitary arrangements. Filth and uncleanness are allowed to accumulate with no power to compel their elimination. Human beings, victims of the sordid avarice of landlords, are crowded into narrow, pent-up tenements with not enough of the free air of heaven to vitalize the blood in their system. Here is *work* for a sanitary commission; work for each member of it "over against his own house;" labor, in which results grand and important may be reached at once, and which will eventuate in saving the lives of thousands of the population of that great city. Here is a field full of interest to the true friend of humanity; not ample enough, perhaps, for that pseudo-philanthropy which exhibits large-hearted benevolence where its own aggrandizement may result, but quite ample enough for him who seeks reward for his untrumpeted charities in the alleviation of the woes and miseries which knock at his own door for relief.

If we were a resident of the great metropolis, we would add our humble efforts to those of the author of this excellent pamphlet, in endeavoring to rouse the people to the importance of better sanitary arrangements. We would endeavor to

open their eyes to see the volcanic fires of disease and death which will, ere long, burst out in their midst, if not quenched. And we would earnestly invite the sanitary commission which has figured so largely in the national eye for so many months past, to turn their attention to the sanitary condition of the nearly half a million of men, women, and children that inhabit the crowded tenements of that city.

PROPOSED REFORMS IN THE MEDICAL DEPARTMENT OF THE ARMY.

Among the subjects of legislation already introduced into the halls of Congress now in session, is that relative to the Medical Department of the army. Only the outlines of the bill introduced by Senator Wilson have as yet come under our notice; enough, however, to indicate the general features of the proposed legislation. The bill provides for the appointment of the following officers :—

"Director-general, with rank of brigadier-general, who shall be chief of the medical corps, and perform the present surgeon-general's duties.

"Sanitary inspector-general, with rank of colonel of cavalry, who, under the director-general, shall have general supervision of all that pertains to the sanitary condition of the army.

"Six sanitary inspectors, with the rank of lieutenant-colonel of cavalry, who shall inspect the sanitary condition of the troops, and report to the sanitary inspector-general.

"Surgeons of first class, with rank of captain of cavalry, for staff, hospital, and bureau duties.

"Fifty surgeons second class, with same rank, to be assigned to duty with regiments.

"Assistant-surgeons, not exceeding seventy, with rank of first lieutenant of cavalry, with duties of assistant-surgeons.

"Not exceeding seventy-five medical cadets, not less than eighteen nor more than twenty-three years of age at their entry, to be examined by a medical board. After three years continuous service they may be examined for promotion to the rank of the highest class of non-commissioned officers.

"As many hospital stewards as the service requires, designated by a sanitary inspector, on the recommendation of the senior surgeon of the post, division, or regiment, with rank of first sergeants of cavalry.

"Sections 2, 3, 4, and 5 provide for selection, by the President, from the *whole army medical corps*, of suitable persons to fill the places of director-general, sanitary inspector-general, and sanitary inspectors, none of whom are to be over sixty years of age. Other officers are to be appointed and promoted by seniority. Vacancies are to be filled from *civil life*, or from brigade surgeons of volunteers, after an examination, who are not to be over thirty-five years of age.

"Section 6 repeals the allowance of extra rations to surgeons, upon the completion of ten years' service.

"Section 7 provides for the retirement of every medical officer sixty-five years old; and section 8 repeals all inconsistent laws."

Supposing this outline to contain the leading and important features of the bill, we make the following suggestions :—

1st. Whether the provisions of this bill do not utterly annihilate the distinction between legitimate and illegitimate medicine: whether they do not open the door wide for the indiscriminate introduction of Eclectics, Homœpaths, Thompsonians, and any irregular who has friends enough at court to secure his appointment? Such may not have been the intention of those interested in framing and introducing the bill; but may not its provisions for the appointment by the President of the controlling officers of the organization, and also of filling vacancies "from civil life or from brigade surgeons of volunteers," be liable to that objection? A man has already received the appointment of brigade surgeon, from the Secretary of War, who is a graduate of no medical college. Under this bill, what guarantee has the profession that such men will not be appointed to the highest positions contemplated in it?

By the present construction of the medical department of the army, no such calamity is likely to occur.

2d. Whether, instead of a reform of already existing errors, and a remedy of defects in the present organization, this bill does not create virtually a new medical bureau based on the old only in semblance, but not in reality? whether, if it be not an abrogation of the present bureau, it be not such a change in all its essential features as to impair its efficiency and usefulness?

3d. Whether giving the President the appointing power in the medical department, is not likely to introduce the question of political preferences as a criterion by which to be guided in their selection? To whichever party the President may belong, the individuals whom he selects for the various positions within his gift are quite certain to coincide with him in political views. Whether in these appointments politics rather than *fitness* may not determine the selection?

4th. Reforms in the department are, to some extent, required. Granted. Whether it be not

better to engraft these necessary reforms upon the old stock instead of supplanting that by a new germ? Sufficient attention is not now given to the sanitary regulations of the army. Admitted. Whether it be not better to establish in the department as at present constituted, a bureau specially devoted to that important subject? Whether that sanitary commission should not be selected from among those whose ability, long service, experience in camp duty, and scientific attainments render them peculiarly adapted for that service, and from the bureau itself?

The surgeon-general ought to have a higher rank in the army, and some degree of authority to enforce the regulations of his department. Granted. Whether it be not better to confer upon the present able and efficient surgeon-general that rank, without introducing a new officer to supersede him, or create a new office for some ambitious aspirant?

5th. Whether the medical department of the army has not, by its humane ministrations, and its rigid exclusion of all illegitimacy and irregularity, commended itself to the confidence of the profession generally during the forty years of its existence; and whether it has not made the name of the American military surgeon honored and revered everywhere? Whether it has not nobly and generously responded to all the claims of the nation upon it, in peace and in the wars of the past, and especially during the present unhappy contention? Whether it has not proved itself in all points an efficient and energetic organization, thoroughly versed in all its duties and requirements? And whether, as an economical measure, it be not better to preserve it in all its essential features?

6th. Whether the object of the orginators of this project for remodeling this department be not entirely sinister, or mercenary, or for self-aggrandizement?

7th. Whether it be not the duty of the profession to scrutinize carefully every provision of this bill before giving it their sanction, and to take care that no specious cry of reform, or proclamation of alleged abuses, shall lead them to lend their influence to consummate a project which shall degrade them to a level with the most arrant quackery?

Howard Hospital.—The number of patients registered in December was 356; prescriptions furnished, 819; patients registered since March 1, 1861, 3075; prescriptions furnished, 8076.

THE LOSS OF CONFIDENCE IN THE SAFETY OF CHLOROFORM.

There is continually appearing evidence of the loss of confidence in the safety of chloroform for general use as an anæsthetic, and a disposition to revert to the exclusive administration of sulphuric ether. The investigation by the Boston Society for Medical Improvement into the alleged causes of death from ether has resulted in the acquittal of that agent from the responsibility of, in any instance, being the cause of death. In this verdict all of those who have given attention to the subject do not agree. At the same time there is a universal admission of a far greater safety in ether. Dr. Kidd, of London, whose name is associated with the study of anæsthesia, and who has been an advocate of chloroform, while admitting, as he does, that there have been forty-one fatal results from ether, believes that "ether is one-third or one-half again more safe than chloroform."

As an evidence of the loss of confidence in the safety of chloroform, we might refer to a letter from the above-named distinguished physician to the editor of the *Dublin Medical Press*, in which he says that "it is a good plan to get the patient under chloroform first, and then keep up the narcotism with ether." Perhaps but little as to safety would be gained by this plan, as, be it remembered, a very considerable number of deaths from chloroform have occurred when but a few breaths of the vapor had been inhaled, and the sleep of death took place before time elapsed for the production of ordinary anæsthesia.

While no case of fatality, undeniably traceable to ether, has been in this country adduced, undisputed deaths from chloroform are numerous—probably exceeding one hundred. At the same time the use of ether has been very extensive among American surgeons, while but few have habitually given chloroform.

After a very considerable use of chloroform, unattended with accident, and while delighted with our personal experience in its administration, we, several years ago, impressed with its appalling mortality continually being reported, abandoned its use. Without totally condemning chloroform as an anæsthetic, we state, as our appreciation of it, that, while so little is known as to the manner in which it produces death, and of means of avoiding accident, and while we have another agent, in the administration of which almost absolute safety can be insured, the general use of chloroform, for anæsthetic purposes, is not justified.

EDITORIAL NOTES AND COMMENTS.

The Surgeon-General of Pennsylvania desires specially to acknowledge the receipt of *twelve* fresh scabs of vaccine, forwarded for the use of the Pennsylvania volunteers by Dr. Otto Meissner, of Millerstown, Lehigh County, Pennsylvania, which will be immediately distributed in in the name of the donor.

We commend the action of Dr. Meissner to the consideration of the profession, and ask whether others cannot do likewise. As the scabs are used, free of charge, for the protection of our fellow-citizens engaged in a war for the support of our institutions, the profession may well imitate the liberality of Jenner, and contribute freely their offerings to the protection of our troops. Numerous offers have been received to *sell* vaccine, the applicants evidently not realizing the difference between its use on those who pay the practitioner for the vaccination, and its application to patriots fighting for the maintenance of our Government and the preservation of our property and homes.

Sanitary Condition of Vermont Troops.—The Vermont troops are among those which have been most disabled by sickness. The first regiment carried with them the measles, which spread generally through their camp at Newport News. The other regiments, whether on account of their encampment in an unhealthy region, or from the marked change of climate from the pure, bracing air of the Green Mountains to the warmer, less genial, languor-producing climate of that portion of Virginia where they are encamped, or from the change from the active labor of the farm and workshop to the more exact military exercise, or from the change of diet and drink, one or all, we are unable to say, have suffered greatly from sickness. Diseases of the typhoid type have been the most common. These facts have attracted the attention of the authorities of that State, and the Governor has commissioned Dr. Ed. E. Phelps, of Windsor, for the special duty of examination into the sanitary condition of the Vermont troops, and has also ordered five additional assistant-surgeons to report themselves at Camp Griffin for special duty, and in addition has sent a supply of medicines from this city. These prompt measures for relief indicate the deep feeling which exists in Vermont for the welfare of her sons who are engaged in this war for the Constitution and the Union, and is highly commendable to her authorities. From Dr. Phelps' report, made under date of January 2, 1862, we learn that there is now less mortality among the troops, a smaller number excused from duty on account of sickness, and that the character of disease is not so malignant as it was a few weeks since. He says:—

"The amount of sickness in the Fifth and Sixth Regiments is greater than in either of the others: in the Sixth ranging from 220 to 250 excused from duty, with 50 or 60 in hospital, and in the Fifth about the same number excused from duty, with more in hospital. In the Third and Fourth the number excused from duty is from 90 to 130, with less than 20 in the hospital in the Third, and about 60 in the Fourth."

Three "log hospitals" have been erected, one each for the Second, Fourth, and Sixth Regiments. These structures have good board floors, and a light roof made of shingles from the Virginia chestnut-wood, worked into shape by the "Green Mountain Boys." They are warm, dry, and can be kept perfectly neat, are readily and thoroughly ventilated, and without discomfort to the patient. In the other regiments good hospital accommodations are also provided. In conclusion, the Doctor says:—

"The great want now is of well-trained and skillful nurses. Men are picked up from the regiments that are good, but very good ones are rare; and it makes a vast difference with the sick, whether the nurse is only good or very good."

A remark which will apply with equal force whether the sick be in camp or city hospital, or with the family at home.

Health of the Army.—The Report of the Medical Board states that the sanitary condition of the United States army is, in general, eminently satisfactory. It declares the fever, which has, to a considerable extent, prevailed in the camps, under the name of typhoid fever, is evidently of a malarious origin, having been most effectually checked when treated as malaria with quinine and mercury. The cases are not what is generally known as typhoid fever in the Northern States. The Board suggests the means of preventing disease of this sort, namely: sufficient space for quarters; proper discretion in allotment

of time for drill; the rigid enforcement of cleanliness; and diversion of the mind by gymnastic and other sports.

Indigent Widows' and Single Women's Society.—The anniversary exercises were held on the ninth instant at the Asylum, Cherry Street, below Eighteenth. Two deaths only have occurred during the year, one at the age of one hundred and three years. The number in the Asylum is seventy-six, almost all of whom have attained an extreme old age and have held respectable positions in life, and by this benevolent association are enabled to close their days surrounded with all needed comforts. Four only were received during the past year, and more applicants are on the list for admission into the house than the managers can make provision for. The income of the society is derived from a fund given for the purpose, from donations and annual subscriptions. The times have affected this charity as well as others, yet few are more worthy of being fully sustained.

Heating City Cars.—We observe that the city railroad cars in Lynn, Massachusetts, are heated by an apparatus underneath the floor, and are thus made warm and comfortable. This matter is worthy the attention of all city car companies. Or, in the absence of such a method of heating the cars, if the conductors would be careful to keep the doors closed, they would contribute vastly to the comfort of the passengers.

Death of Prince Albert.—Our foreign exchanges come to us in mourning for the death of Prince Albert. His disease was typhoid fever, from which he died shortly before eleven on the evening of the 14th of December. He was attended by Sir James Clark and Dr. Jenner, with Sir Henry Holland and Dr. Watson, as counseling physicians. The attack of the disease was not very severe in its early symptoms, but, from its very nature, taxed heavily the resistant vital powers and energies of the sufferer. "There was genuine grief in every English heart," says the *Lancet*, "when the sad news of the Prince's death was told." Singularly gifted, able, and wise in the exercise of his talents, his death is a heavy and irreparable loss to the country. Says the *Lancet*:—

"His high scientific attainments; his encouragement of the arts and sciences—not merely as a cold patron, but as one skilled himself to judge accurately, and willing himself to join in the work of advancement—drew to him a heartfelt respect and a deference from men of intellect and science, such as never were previously extended to any Prince of this land—such as no Prince of this land ever before deserved. His name will always be associated with that wonder-work, which may almost be said to have risen at his bidding, ten years ago, so energetically and so earnestly did he devote himself to the realization of that grand idea. And the new Exhibition, fast progressing toward completion, is so identified with his name that no one can now enter its portals without sadly thinking of the good Prince whom we have lost, of the master-mind at rest, and forever." Says the *Times and Gazette:* "He was the promoter of every attempt to develop the resources of the country, to enlarge the mental capacity, and increase the comforts of the people, and thus to lay wider and deeper foundations for the prosperity of future generations. We gratefully record his promotion of art, science, and literature."

Correspondence.

NEW YORK CORRESPONDENCE.

New York, December 28th, 1861.

Our medical gladiatorial arena, the Academy of Medicine, which has been the field for so much senseless wrangling, was recently the scene of a particularly disgraceful affair. The object this time pitted was a visiting stranger in the hall, although well known and respected in the profession, who, on attempting to speak on a subject which was introduced, and which concerned his own reputation, was most insultingly gagged.

The subject announced for discussion was a medico-legal one, involving the medical evidence in a well-known murder trial. In this case, Dr. Swinburne, of Albany, made the autopsy, and had given much time and study to the medico-legal investigation, and was, of course, interested in hearing the proposed discussion of the questions which were announced for the meeting of the Academy. After the opinions of one of the medical witnesses in the case had been ventilated at length, it was proposed by a prominent member that Dr. Swinburne, who was present as a visitor, be invited, as is the courteous custom, to take part in

the discussion. Dr. Swinburne offered to read his notes of his experiments having a bearing on the case, and also the opinions of eminent medico-legal jurists who had been consulted in reference to the attested facts of the case, but the speaker and his friends, who had already made up their minds from hearing one side of the matter, and like the Dutch judge who did not wish to have his mind confused by hearing evidence on two sides of a case, insultingly snubbed the Doctor, so that he was obliged to be silent. The affair was a great breach of the etiquette which should protect a stranger in a scientific body.

The medical classes this session look rather fair in numbers—certainly as large as under the circumstances could have been anticipated. Perhaps none of them are remunerative to the teachers. The new Bellevue Hospital College, which was pre-announced with so much promise, and opened with so much flourish, has in every way fallen short of the general expectation.

Some influential parties are considering the project of starting a new medical journal. The present times do not seem propitious for such an enterprise, but the field for it is open. I have not understood whether it is designed to be a weekly or monthly issue. Of late, your journal is almost the only one I meet with among the practitioners. Our journals seem to be ephemeral, and several have recently ceased their existence. When poor Reese departed, his journal, which he used as a lash that was a terror to some cliques and evil-doers among us, soon followed him to the land of silence.

The *American Medical Monthly* has always been in good favor, but it is said to be about passing into new hands, who it is hoped will not let it languish.

S.

FREE INCISION INTO THE TONSILS IN DIPHTHERIA.

The following is an extract from a letter addressed to Dr. Francis Gurney Smith, of this city, by Dr. Alexander McIntosh, of Antigonish, Nova Scotia:—

"Diphtheria and scarlatina were raging in Nova Scotia when I returned from Philadelphia. Three-fourths, at least, of those attacked fell victims to it.

"I learned that the tonsils of those that recovered had opened spontaneously, and that there was a change for the better immediately after. I concluded to open the tonsil, or tonsils, as the case might be, for the future. The result, I am happy to say, was that I lost scarcely a patient after I adopted this mode of treatment.

"I used a curved, sharp-pointed bistoury; pus always escaped; never had any serious hemorrhage. I then cauterized the cavity and edges with the nitrate of silver, either in the solid form or in solution, twenty grains to the ounce, three or four times a day; hot applications to the neck; tonics, stimulants, or depletion, as the case required.

"Physicians from neighboring counties wrote to me to know my treatment. They tried it, and with like success.

"If this mode of treatment is not known to the profession in the United States, you will oblige me by making it known as soon as possible, for I feel confident that it is the only proper treatment."

ARMY CORRESPONDENCE.

The Sanitary Commission; Wilson's Bill.

Cincinnati, January 14th, 1862.

Messrs. Editors:—I have just read with much satisfaction your article on "The Sanitary Commission—*cui bono?*" It would have gratified me still more had it pleased you to have elaborated this matter still further, and said something of the corps of brigade surgeons as a sanitary commission, and of each brigade surgeon as a sanitary officer; for it is their duty as a corps or commission, and his as brigade surgeon commissioner, to do just what the Sanitary Commission is doing, and more intelligently and effectively, by virtue of his medical education. Then I say, with you, that "the peculiar province of the science of medicine invaded by this attempt to commingle lawyers, theologians, and civilians in a Sanitary Commission." Most true again, "It comprises in its scope all that pertains to hygiene, as well as therapeutics; all that relates to prevention, as well as the cure of disease."

The humblest member of the corps of brigade surgeons of the army, it does not become me to speak for the corps; but for myself, I desire to say to you that I consider it to be my solemn, sworn duty to act for the brigade to which I expect soon to have the honor of being attached, as its sanitary officer, as well as surgeon; and to institute sanitary regulations, and suggest and carry into operation means for the prevention of sickness among the troops, to the end that a mixed commission of doctors, lawyers, haberdashers, civilians, and scullions, shall not have it in their power to boast of their wonderful achievements.

The last paragraph of your article, and indeed every line and word, meets my most cordial approbation; and from recent association with many officers of the medical staff of the army at Washington and other cities, with whom I have conversed on the subject, I am satisfied, could it be placed in their hands, would be warmly approved. True, the Sanitary Commision *was* organized ONLY "*to aid the Medical Bureau, without displacing it, or in any manner infringing upon its rights and duties;*" but *has* it aided the medical bureau,

and not sought to displace it, or in any manner infringe upon its rights and duties? The reports of the Commission show for themselves that it *has* sought to displace the *head* of the Medical Bureau—and why? Because that head very properly declined to submit to the dictation of the Commission in the removal of able and efficient medical officers of the hospitals at Alexandria, Virginia, and other places, and appoint its favorites in their place. In their Reports they have clamored for his removal—for what? charging what? Nothing! They make no specific charge whatever, but by innuendo, that the Surgeon-General is inefficient.

Whence emanated the bill introduced in the Senate by Gen. Wilson, Chairman on Military Affairs, "to reorganize the Medical Department of the Army"? The Sanitary Commission, as I am informed. The 7th Section of the bill provides for the retirement of every medical officer sixty-five years old. Why? To get rid of the present able, experienced, and accomplished head of the Medical Bureau. Hitherto the world—not the *N. Y. World* newspaper, nor the *Tribune*, nor the *New York Medical Times*, all aiding and abetting the Commission in the raid against Surgeon General Finley—hitherto the world has supposed that age and experience in the physician and surgeon was a *sine qua non*.

It is gratifying to know that the 7th Section does not emanate from the medical profession, or from any known member of it. The universal confidence reposed in the Surgeon-General by the medical staff of the army, forbids the belief that it ever originated with any respectable member of the profession. The 1st Section of the bill is objectionable, inasmuch as "director-general" is neither professional nor expressive, whereas surgeon-general is both; as well say for regimental surgeon, "director of the regiment," or "regimental director;" and what would this express? Nothing at all. The rank of brigadier-general is eminently proper for the surgeon-general, and an assistant surgeon-general with rank of colonel of cavalry. Hospital directors, etc. etc., as suggested in the report requested of Surgeon-General Finley by the Secretary of War. But no medical officer to be retired except from physical debility.

There are other objections to the "Wilson Bill," but I have not time to discuss them. I trust you will do so through the Reporter. Let the Sanitary Committee attend to its legitimate business, if it has any, and aid the medical bureau and staff of the army in its energetic and Christian duty, (the surgeon-general is a Christian as well as an able and efficient officer,) and not seek to interfere with and attempt to break it down, assuming to know more of medical science than medical men themselves; composed as it is of a "mixture of law, theology, civil, and military experience, with medicine, legitimate and illegitimate, sandwiched between"—the *toute ensemble* forming a hybrid monster—notwithstanding which, confining itself to its legitimate duties, it would insure the co-operation of medical men instead of their lukewarmness and negative assistance. U. S. A.

Revaccination in the Army.

Camp Curtin, January 2, 1862.

Sir:—In answer to your inquiry relative to the result of revaccination in the 54th Regiment P. V., I beg leave to offer for your consideration a few facts gleaned from data now before me. In the month of April, 1860, as vaccine physician of the borough of Chester, I vaccinated in all over one hundred cases, eighty of which had been previously vaccinated, and presented the true vaccine mark upon the arm; at least sixty of those revaccinated took the vaccine disease, which ran its course through the several stages with as much regularity as it usually does in that of infants, with the exception that the inflammatory symptoms were much more violent.

In the month of November, 1861, in obedience to your orders, I commenced the vaccination of the regiment to which I have been assigned by you. In all some five hundred men were vaccinated. Out of that number, one in every six presented the true vaccine vesicle. I am safe in saying that in at least three hundred cases the revaccination was perfectly successful. Two cases fell under my observation which had been vaccinated on several previous occasions without effect, which in the present instance were also unsuccessful. It is due to Assistant-Surgeon A. W. Mathues to say that the data relative to this regiment were furnished by him. Without pretending to go into any argument relative to the question of revaccination, I merely remark that, as far as my own experience extends, it is decidedly in its favor.

J. M. Allen,
Surgeon 54th Regt. P. V.

To Surgeon-General H. H. Smith.

New Invention: the Patent Siphon-Tap Cork-Screw.—A very pretty and useful invention, and likely to be found of great value in the sick room. The parched and fevered patient need now have no more flat, unpalatable drinks. By screwing this little incorrodible siphon-tap into the cork of a bottle of champagne, soda-water, lemonade, mineral waters, or other aerated beverages, he will possess the means of drawing off the contents at pleasure, while the grateful briskness of the fluid is preserved to the last drop. It is manufactured by Mr. Morton, of Cheapside.—*London Lancet.*

NEWS AND MISCELLANY.

Tracheotome.—M. Maisonneuve, in a paper to the Academy of Sciences, France, draws attention to an instrument, which he has recently devised, for facilitating the operation of tracheotomy, and which he proposes to call "tracheotome." "He was struck," he remarks, "by the difficulties which both himself and others had encountered in the performance of this operation," and thought that the process might be much simplified by the employment of an instrument which would cut from within outward, instead of, as heretofore, from without inward. His invention consists in an implement somewhat like a reaping-hook, the point of which is made to enter the crico-thyroid membrane, to penetrate into the trachea, and cut its way back through the tissues by emerging in a direction downward and forward.—*Lancet.*

A Veteran Dead.—It is seldom, in these days of "fast living" and fast dying, that an individual lives beyond one hundred years. An instance, however, has occurred in this city. Michael Comins died, a few days since, at the age of 105; he was born in the County of Wexford, Ireland, in 1757. He took an active part in the Irish rebellion of 1798. Has always been in excellent health, and at the time of his death had a most stentorian voice. His wife is still living, at the ripe age of 103 years, and still attends church.

Military Hospitals.—The military hospitals in this city are receiving large quantities of goods of various kinds, both from public and private sources. Those from private hands pass direct from the quartermaster to the various hospitals. Persons in the country desiring to send articles and goods for the soldiers at Washington, should address all communications to Dr. Lamb, Medical Purveyor, U. S. A., Washington. They will thereby save the expense of paid agents and collectors, and insure the proper distribution of their charities.

Pennsylvania Hospital.—The number of admissions into this hospital, during the year 1861, was 1710. Of these, 1361 were males and 349 females. Adults, 1496; children, 214.

Gross's Surgery.—We are informed that the first edition of this great work is exhausted, and that a second, thoroughly revised, edition will speedily appear. By condensation and lessening the size of the type, a vast amount of matter will be added to the new edition without increasing the bulk of the volumes.

Promoted.—Dr. James Bryan, of this city, late Surgeon to the Cameron Dragoons, has been promoted to the post of Brigade-Surgeon, and assigned to the Burnside expedition.

Surgeon-General Henry H. Smith.—The following paragraph from the recent message of the Governor of the State of Pennsylvania expresses a well-deserved appreciation of the efficient labors of the Surgeon-General:—

"The care which has been bestowed upon the comfort of the volunteers, and the goodness and sufficiency of their supplies of all kinds, and the excellent arrangements of the Medical Department, under the control of Surgeon-General Henry H. Smith, are proved by the fact that more than 60,000 men have been for various, generally short periods at Camp Curtin since the nineteenth of April last, and that down to the first of January instant there died but forty-nine men at that camp, viz., forty-four from sickness, two (belonging to regiments from other States) who had been injured on railroads, two accidentally killed in Camp Curtin, and one shot in Harrisburg."

We learn that Dr. Tripler, Medical Director of the Army of the Potomac, will soon issue an order to the surgeons of the various hospitals, directing them to furnish a weekly report of deaths, including the name, company, regiment, and disease of the deceased. This report has, heretofore, been made quarterly.

There are now four hundred patients in the Mansion House Hospital at Alexandria, which is under the superintendence of Dr. J. B. Porter, an old and efficient army officer. Dr. Rankin, of Cumberland County, Pa., is one of his staff.

Rensselaer Polytechnic Institute, Troy, N. Y.—From the annual register of this Institute, it appears that eighty-two students were in attendance during the last year, and that the Graduating Class numbered twenty. There are three general courses in the Institute, extending over a period of three years each, viz., Civil and Topographical Engineering and General Science, to which the trustees propose to add a course in Mining Engineering, and one in Military Science, the latter of which is now in full progress. The Institute was founded in 1824, reorganized in its present form in 1849, and stands deservedly high as a school for instruction in the mathematical, physical, and natural sciences.

Army Medical Society at Cairo, Mo.—"An association, called the Army Medical Society, has been formed, composed of the surgeons and assistant-surgeons connected with the various regiments and hospitals at Cairo, Bird's Point, and Mound City, its object being the improvement and diffusing of medical science among the members. The meeting was held at the office of Dr. Taggart, the medical purveyor at this post, and was temporarily organized by Surgeon Stahl being called to the Chair, and Brigade-Surgeon Burke appointed Secretary. Brigade-Surgeon Brinton explained the object of the meeting as being one in which all the surgeons now engaged in the army should feel a deep interest during the war. Surgeon Bringhurst moved that a committee be appointed to report a list of officers for the government of the Association. The following gentlemen were elected: Surgeon Stearns, President; Vice-Presidents, Surgeons Davis and Bowman; Secretary, Surgeon Taggart. They will hold a meeting once a week, and two papers

will be read at each, for discussion; and every subject connected with army surgery will be discussed."

A Work on "New Remedies."—Dr. Elsberg, of New York, in connection with Dr. Percy, is preparing a work on "New Remedies." It will embrace all valuable medicinal agents introduced into the Treatment of Disease since the year 1830, up to the present day, detailing their history, description, action, and uses, and giving the most approved Formulæ of Preparation, Preservation, and Administration. In Formulæ it will be particularly full, for the use of both physicians and pharmacists. Novelty not being deemed a sufficient passport for admission into confidence unless sustained by merit, and with the only object—*to be useful*—and the only means—*Labor to approach the Truth*—constantly before us, we are determined that no really useful remedy, introduced during the last thirty years, shall be slighted, while no undue prominence shall be given to undeserving articles. Nor will uncertainty or ignorance at any point that the actual advance of science has not reached, be sought to be concealed by illusory hypotheses or ill-founded statements. Any heretofore unpublished information calculated to add to the practical utility of the work, that may be in the possession of our readers, will be gratefully received, carefully considered, and, if used, appropriately acknowledged. The lamentable circumstances that at present preoccupy the mind of every good citizen—our beloved country's trials—may somewhat delay the realization of our enterprise; but we bespeak for it, even in these troublous times, the co-operation of the profession.

Professor Peaslee recently performed the operation of tapping, on a young lady at Pittston, Pa., and removed *one hundred and forty-nine pounds and three ounces* (149 lbs. 3 oz.) of dropsical fluid. It was weighed, in Dr. Peaslee's presence, by Dr. Lawson and Mr. J. Loveland, of that place. The abdominal circumference of the patient before the operation was *six feet and two inches*, (74 inches.)

This was the same patient from whom Dr. Peaslee removed *one hundred and thirty-five pounds* of fluid (135 lbs.) on the 29th of April last. The circumference then was five feet and seven inches, (67 inches.)

A monument to the memory of Sir Humphrey Davy is about to be erected at Penzance. It will consist of a granite column and base, surmounted with a statue of the great chemist, holding a safety lamp in his hand.

Agassiz's Opinion of the Results of his own Labors.—This great naturalist, in an article in the *Atlantic Monthly*, thus modestly alludes to the results of his studies:—

"The education of a naturalist, now, consists chiefly in learning how to compare. If he have any power of generalization, when he has collected his facts, this habit of mental comparison will lead him up to principles, to the great laws of combination. It must not discourage us that the process is a slow and laborious one, and the results of one lifetime after all very small. It might seem invidious, were I to show here how small is the sum total of the work accomplished even by the great exceptional men, whose names are known throughout the civilized world. But I may at least be permitted to speak of my own efforts, and to sum up in the fewest words the result of my life's work. I have devoted my whole life to the study of nature, and yet a single sentence may express all that I have done. I have shown that there is a correspondence between the succession of fishes in geological times and the different stages of their growth in the egg—this is all. It chanced to be a result that was found to apply to other groups and has led to other conclusions of a like nature. But, such as it is, it has been reached by this system of comparison, which, though I speak of it now in its application to the study of natural history, is equally important in every other branch of knowledge."

Appointments.—Dr. E. N. Morgan, of Pownal, is the Surgeon of the Seventh Vermont Regiment. Dr. Oswald Warner, City Physician of Patterson, New Jersey, has been appointed Assistant-Surgeon in the United States navy, and assigned to duty on the steamship Western World. Dr. J. H. H. Brientnall, of Newark, formerly Surgeon on the Collins steamer Atlantic, has also been appointed Assistant-Surgeon U. S. N., and assigned to the steamer Crusader, now lying in New York harbor.

Dr. G. D. Beebe, of Chicago, has been appointed a brigade surgeon.

Sick and Wounded Soldiers.—On the third instant there were 1257 sick and wounded soldiers in the hospitals of the Potomac. Of these, there were 44 Pennsylvanians in the Seminary Hospital at Georgetown; 31 in the General Hospital, (Union Hotel,) Georgetown; 37 in the Hospital at Columbia College, Washington; 112 in the General Hospital at Alexandria; 3 in the Fifth District School-house Hospital, (branch of the General Hospital on E Street;) 20 in St. Elizabeth Hospital, (Eastern branch;) and 28 in the Hospital for Eruptive Diseases, at Kalorama.

The Power of Suffering in Silence is that one virtue which gives something like a grandeur to the character of the English peasant — rude, coarse, unimaginative, and lumpy as he may seem to be in general. No one is better qualified to give testimony to this than Miss Nightingale. In a recently-published letter she says:—

"The simple courage, the enduring patience, the good sense, the strength to suffer in silence—what nation shows more of this in war than is shown by our commonest soldier? I have seen men dying of dysentery, but scorning to report themselves sick, lest they should thereby throw more labor on their comrades, go down to the trenches, and make the trenches their death-bed. There is nothing in history to compare with it. Other nations may do

it for glory, but we for duty, as the Duke of Wellington said. I say no one has seen the horrors of war as I have, yet I was glad to see the spirit of war arising in our volunteers. Say what men will, there is something more truly Christian in the man who gives his time, his strength, his life if need be, for something not himself—whether he call it his Queen, his country, or his colors—than in all the asceticism, fasts, and humiliations that have ever been made. And this spirit of giving one's life, without calling it a sacrifice, is found nowhere so truly as in England."—*Lancet.*

Munificent Gift.—Mrs. Paturle, widow of Mr. Paturle, formerly factory owner and member of the Chamber of Deputies in France, has just founded in the town of Cateda a hospital, completely fitted for the reception of twenty-four patients.

M. Chassagny, of Lyons, has proposed an ingeniously constructed amygdalotome, resembling Fahnestock's instrument. The straight fork is replaced by horizontal hooks, which draw the hypertrophied gland into the ring of the guillotine. That it is now and then very difficult to get the tonsil into the ring every operating surgeon knows.

Population of the Globe.—A Professor of the Berlin University has been making curious researches respecting the population of the globe. The following is the result:—Population of Europe, 372,000,000; of Asia, 720,000,000; of America, 200,000,000; of Africa, 89,000,000; of Australia, 2,000,000: total population of the globe, 1,283,000,000. The average number of deaths per annum in certain places where records are kept, is about 1 to every 40 inhabitants. At the present time the number of deaths in a year would be about 32,000,000, which is more than the entire present population of the United States. At this rate the average number of deaths per day is about 87,861; the average per hour, 3653; the average per minute, 61. Thus, at least, every second a human life is ended. As the births considerably exceed the deaths, there are probably 70 or 80 human beings born per minute.

Eight Children at a Birth.—On the 2d of August, Mrs. Timothy Bradlee, of Trumbull County, Ohio, gave birth to eight children—three boys and five girls. They are all living, and are healthy, but quite small. Mr. Bradlee was married six years ago to Eunice Mowery, who weighed 273 pounds on the day of her marriage. She has given birth to two pairs of twins and now eight more, making twelve children in six years. Mrs. Bradlee was a triplet, her mother and father both being twins, and her grandmother the mother of five pairs of twins.

Theories in Relation to Malaria.—An important discovery in connection with sanitary science and with physical geography has been made by the illustrious agricultural chemist, Boussingault. He lately read before the Academy of Sciences a paper in which he demonstrated, with remarkable precision, that oxide of carbon accompanies the liberated oxygen, whenever the sun shines upon a vegetable submerged in water impregnated with carbonic acid. The presence of so deleterious a gas as carbonic oxide in the atmosphere of marshy countries is manifested by this discovery, and it explains the fatal attacks which animals suffer in the health when exposed to the influence of marshy exhalations.

On the other hand, it is maintained, that in large cities where coal is consumed, as in Paris and London, carbonic oxide is much more abundant in the atmosphere than it is in the most unhealthy marshy situations, and yet marsh fevers do not prevail in those cities. This has led to the conclusion that the cause of marsh fevers is due to a solid organic body, a microscopic insect, or the *débris* of an insect carried through, and penetrating the air-passages of the lungs, and acting like a putrid foreign body which vitiates the whole mass of the blood in the animal, by a process of putrefactive fermentation.—*Scientific American.*

The New York Ophthalmic Hospital.—The annual meeting of the Board of Directors and members of this institution was held at the Hospital building, January 14th. It appears by the report that the attending surgeons, Drs Stephenson and Garrish, have treated, during the last quarter, 296 patients, suffering with diseases of the eye; 9381 poor persons have received gratuitous advice and treatment at the institution since its foundation. The hospital is open for the reception of patients every Tuesday, Thursday, and Saturday from one to four o'clock P.M.

Dr. Marion Sims has returned to New York from a most successful tour of some of the more important foreign hospitals. Dr. Sims is largely interested in the establishment of the Woman's Hospital in New York. His remarkable success in the treatment of certain diseases of women has given him an extensive reputation.

Medical Society of the State of New York.

The Fifty-fifth Annual Meeting of this Society will be held in the City of Albany on Tuesday, Wednesday, and Thursday, the 4th, 5th, and 6th days of February next. The meetings of this Society are always invested with interest, and bring together a large number of medical men from the various sections of the State. No similar institution in the country exerts a more extended and beneficial effect upon the profession than the New York State Medical Society. It is nobly fostered by the State, and its Transactions are made a State publication. The approaching meeting will lack nothing of former interest, and all physicians who can do so, whether connected with the Society or not, should make a point of being in Albany during its session. The President of the Society is Dr. Edward H. Parker, and the Secretary, Dr. S. D. Willard. The Reporter will contain an early notice of the deliberations of the Society.

MARRIED.

Delamater—Wamsley.—On the 3d instant, by Rev. S. Armstrong, Jacob J. Delamater, M.D., and Sarah M. Wamsley, all of Newark, N. J.

DIED.

Kitchell.—At his residence, near Madison, N. J., on the 29th ult., William Kitchell, M.D., aged 34 years.

Communications Received.

Connecticut—Dr. C. R. Hart, Dr. A. W. Coates, L. S. Paddock, L. Bailey, W. Bennett. *Delaware*—Dr. T. C. Rogers, with encl. *District of Columbia*—Dr. J. T. Crawford, with encl. *Illinois*—Dr. J. M. Mack, Dr. T. M. Swan, with encl.; Dr. E. A. D'Arcy, with encl.; Madison Reece, D. W. Stormont, A. S. Barr. *Indiana*—Dr. D. Clark, F. C. Eckelman (2), J. A. Blackwell, W. P. Welborn; Dr. J. A. Wendell, with encl. *Iowa*—Dr. John Kerr, Dr. B. Hinchman, with encl. *Kentucky*—Dr. W. D. Gay. *Maine*—Drs. N. T. Palmer, D. W. C. Chamberlain, Whitmore & Plympton, Cyrus Briggs, A. G. H. Pulsifer, B. Bussey, C. Seavey, W. H. Brown, G. P. Jefferds, L. Watson, W. N. Deming, J. Stevens, S. Bradbury, W. H. Allen, R. K. Jones, each with encl.; C. T. Trafton, C. Morse; Drs. E. Mauter, J. G. Brooks, R. Moody, D. Flanders, N. P. Monroe, J. A. Rouse, T. Frye, D. Rose, H. Bliss, C. A. Packard. E. A. Daggett, I. T. Acorn, S. B. Cushman, each with encl.; Drs. S. S. Anderson & Son, W. E. Payne, H. C. Bradford, E. Edgcomb, S. York, S. Oakes, N. C. Harris, J. P. Fessenden, A. Danforth, each with encl.; M. S. Briry, with encl. *Maryland*—Dr. W. S. Forwood, Dr. T. E. Wills, with encl.; Drs. T. Howard, W. B. Magruder, each with encl.; J. H. Taylor. *Massachusetts*—Dr. L. Traver, F. W. Mason, John Stowe, G. H. W. Herrick, C. Cullis, C. M. Tuttle; Dr. O. H. Flagg, with encl.; C. L. Spencer, Dr. Chapin, with encl.; J. T. G. Nicholls. *Michigan*—Dr. W. J. McIlench, Dr. D. C. Powers, with encl.; Dr. D. Henderson, with encl.; Dr. A. M. Buckman, with encl. *New Hampshire*—Dr. O. A. Woodbury, with encl.; J. A. Smith. *New Jersey*—Dr. J. F. Shepherd, with encl.; Steph. Wickes, A. A. Howell, C. W. Robbins, Drs. J. V. Schenck, C. V. Moore, each with encl.; Dr. L. B. Irwin, H. Van Blarcom, J. W. Jackson, N. S. King; Dr. E. Blackwell, with encl.; R. B. Brown, Drs. S. S. Kennedy, J. B. Vanderveer, each with encl.; Drs. T. Walter, A. S. Burdett, each with encl.; Dr. E. Schumo, with encl.; W. Pierson, Dr. J. W. Jackson, with encl.; S. Sproul, L. Jamison, W. Johnson. *New York*—Dr. M. R. Carson, J. B. Hayes, Drs. J. Hoffman, J. B. Graves, J. W. Gray, each with encl.; Dr. N. C. Husted, R. Jewett, T. E. Garribrance, George K. Smith, H. C. Todd, Drs. L. G. Hall, M. Felter, Otto Roten, Platt & Neilson, B. A. Mynderse, S. D. Willard, J. Swinburne (2), J. Burke, W. M. Fleming, C. A. Budd; Drs. R. Worcester, J. A. Mabey, R. A. Eaton, H. C. Newton, F. Chase, F. Barker, L. T. Warren, W. Wright, A. A. Wright, J. G. Larkin, each with encl.; W. H. Studley, Dr. W. D. Towner, Dr. E. E. Collins, H. Meeker, C. E. Blumenthal, S. Greene, W. H. Hadley, J. Van Ness, W. A. Townsend, C. G. Bacon, D. L. D. Sheldon. *Ohio*—Dr. E. M. Kramer, Dr. J. H. Estep, L. B. Emerson, J. M. Weaver, Dr. J. M. Kuhn, with encl.; Edw. R. Bell, H. P. Kay, J. F. Capell, Dr. H. L. Chaney, with encl.; S. P. Hunt, Dr. T. J. Wright, with encl.; Dr. Lynch; T. R. Simpson, E. Peirce, Dr. J. Dickinson, with encl. *Pennsylvania*—Dr. R. H. Patterson, Drs. Leiser, F. C. Harrison, each with encl.; Drs. Amos Seip, Traill Green, D. D. Detwiler, each with encl.; H. W. Marbourg, A. P. Dutcher, D. D. Loop, Daniel Holmes, S. Thompson (2), A. Lippincott, D. Gamble, J. S. Brallier, B. Brown; Dr. J. E. Hamilton, A. Sheller, J. L. Peirce, G. R. McCoy, each with encl.; A. L. Cresler, C. A. Voorhies, J. M. B. Jackson, J. W. Thompson, E. Hottenstein (2), Drs. C. R. Gorman, Harmon Yerkes, each with encl.; Drs. U. Q. Davis, J. N. Beck, J. B. Luden, each with encl.; Drs. M. Newberry, W. Voss, S. W. Virtue, each with encl.; J. Breitenbach, John Fay, M. Emanuel, J. A. Landis, A. F. Illig (2); Drs. W. H. Worthington, G. F. Horton, J. Galbraith, each with encl.; Dr. E. G. Groom, C. B. Warrington, R. Armstrong, L. W. Virtue, D. W. McConaughey, W. E. Barnes; Dr. J. G. Kohler, with encl.; J. B. Livingston, R. A. Moon, G. S. Wentz, H. Brubaker, J. Ream; Drs. R. P. Greenleaf, Ira Day, D. P. Pancoast, Thos. Mabon, M. R. Gryder, J. H. Reed, each with encl.; J. H. Grove, G. R. McCoy, T. J. Groom. *Rhode Island*—Dr. L. A. Martin, Dr. L. M. Wheeler, with encl. *Vermont*—Dr. Benjamin Lewis, N. D. Ross, F. L. Burdick, J. H. Talbot, Dr. A. G. Bugbey, with encl.; H. Porter. *Virginia*—Dr. M. Campbell, with encl.; Dr. W. Thompson, with encl.

Office Payments.—Drs. Knox, Smith, Thomas, Sellers, Hornberger, Seip, Shelmerdine.

Vital Statistics.

Of Philadelphia, for the week ending Jan. 11, 1862:

Deaths—Males, 120; females, 142; boys, 69; girls, 73. Total, 262. Adults, 120; children, 142. Under two years of age, 77. Natives, 195; Foreign, 55. People of color, 12.

Among the causes of death, we notice—Apoplexy, 9; convulsions, 11; croup, 11; cholera infantum, 1; cholera morbus, 0; consumption, 36; diphtheria, 5; diarrhœa and dysentery, 4; dropsy of head, 3; debility, 21; scarlet fever, 20; typhus and typhoid fever, 6; inflammation of brain, 4; of bowels, 6; of lungs, 9; bronchitis, 2; congestion of brain, 5; of lungs, 1; erysipelas, 2; hooping-cough, 0; marasmus, 4; small-pox, 12.

For week ending January 12, 1861.....271
" " January 11, 1862.....262

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 2168.

Of New York, for the week ending Jan. 6, 1862:

Deaths—Males, 202; females, 188; boys, 114; girls, 105. Total, 382. Adults, 163; children, 219. Under two years of age, 110. Natives, 213; Foreign, 119; Colored, 1.

Among the causes of death, we notice—Apoplexy, 0; infantile convulsions, 29; croup, 15; diphtheria, 6; scarlet fever, 47; typhus and typhoid fevers, 10; cholera infantum, 0; cholera morbus, 0; consumption, 64; small-pox, 10; dropsy of head, 15; infantile marasmus, 12; diarrhœa and dysentery, 0; inflammation of brain, 0; of bowels, 0; of lungs, 23; bronchitis, 15; congestion of brain, 0; of lungs, 0; erysipelas, 0; hooping-cough, 0; measles, 0: 175 deaths occurred from acute disease, and 29 from violent causes.

Population of New York, 814,277. Mortality, 1 in 2131·7.

Medical Directory.

Pennsylvania Hospital, Eighth, below Spruce. Entrance on Eighth Street.

Medical Clinic on Wednesdays and Saturdays, at 10 A.M., by Dr. Gerhard.

Surgical do., at 11 A.M., by Dr. Geo. W. Norris.

Medical Library of the Pennsylvania Hospital.—Open on Wednesdays and Saturdays.

Philadelphia Hospital.—Medical Clinic on Wednesdays and Saturdays, at 9½ A.M., by Dr. Da Costa.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A.M., by Dr. S. D. Gross.

Wills Hospital for the Eye and Limb.—Clinics, Wednesdays and Saturdays, at 11 A.M., by Dr. William Hunt.

Howard Hospital, Lombard Street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P.M. Monday and Thursday—Dr. Turnbull, at 1 P.M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P.M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1; and Dr. Morehouse, at 5 P.M. Monday and Thursday—Dr. Meigs, at 5 P.M. Tuesday and Friday—Dr. Atkinson, at 3½ P.M.

Jefferson Medical College, Tenth, above Wainut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P.M., by Dr. Pancoast.

University of Pennsylvania, Ninth, below Market.

Surgical Clinic on Wednesdays and Saturdays, at 1 P.M., by Prof. Smith.

Dispensary Service every afternoon at 3 P.M., by Drs. Dunton and Hodge.

Pennsylvania College of Dental Surgery, 528 Arch Street.—Clinical Lectures daily, (except Sunday,) from 2 to 4 P.M., by Dr. Goodwillie.

Philadelphia Lying-in Charity.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning, at 9 o'clock, by Dr. Edwin Scholfield.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, Nos. 274, 275. PHILA., JANUARY 18, 25, 1862. New Series, Vol. VII. Nos. 16, 17.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Poisoning by Aconite.

Trial of John Hendrickson, Jr., for the poisoning of his wife in 1853.

By John Swinburne, M.D.,
Of Albany, New York.

In reviewing this celebrated trial I shall only give a synopsis of its various parts:—

1st. The medical testimony, including the dissection, *post-mortem* condition of the internal organs, etc.

2d. The moral and circumstantial points of especial importance taken from the address of District-Attorney Colvin and Attorney-General Chatfield. Also quotations from Judge Marvin's address to the prisoner before sentencing him.

3d. The legal evolutions of the same.

4th. The review of the letter of Prof. Alonzo Clark, of New York City, and others, as copied from the Albany *Evening Journal* and *Argus* of May 1st, 1854. This was an *ex parte* statement made by himself, (unsolicited by Prof. T. Romeyn Beck,) and presented to Governor Horatio Seymour less than one week before the time fixed for execution, and about one year from the conviction of the prisoner.

5th. Also a review of two resolutions passed by the Pathological Society of New York City. The able and comprehensive review by Prof. T. G. Geoghegan, who so fully elucidated the justly celebrated case of McConky. (See Dublin Hospital Reports.)

In this celebrated trial, though the indictment was rendered "Poison by corrosive sublimate," Dr. Geoghegan, after examining it in all its bearings, stated that McConky was evidently poisoned, but that the special agent employed was aconite; notwithstanding it could not be detected in the body, yet from its known physiological effects and the appearances *post mortem*, he was enabled to state what the precise agent used was; while the subsequent conviction and confession of the prisoner fully confirmed the correctness of his judgment.

I am frequently asked for a copy of Dr. Geoghegan's letter in reference to this case; I therefore take this opportunity to present it and its merits to the profession. I trust no one can read either of these reports of Prof. Geoghegan without feeling thoroughly convinced that he is familiar with all the details of vegetable poisons. The publication of this article is prompted from various considerations:—

1st. It is due the profession that a report of its great intrinsic worth should not be lost for want of publication.

2d. The *ex parte* views of Dr. Clark were sought and advanced to the detriment of the merits of the case and in opposition to the facts in the premises.

3d. While the same party has recently sought to pervert the merits of this testimony, that it might be used to the detriment of one of the medical witnesses, (in another criminal trial,) and who had investigated both of these cases, and thereby became of necessity a medical witness for the prosecution, it therefore behooved me to present a synopsis of the matter, that an enlightened profession may judge of the merits and demerits for themselves.

4th. In the American edition of Taylor's Medical Jurisprudence, by Dr. Hartshorne, of Philadelphia, is an allusion to this identical Hendrickson case, which, at first sight, might appear as if from the pen of Prof. Taylor; but, upon careful inspection, it will be found to emanate from an entirely different source. In other words, this notice never would have found a place in the

American reprint by the sanction of Prof. Taylor; nor was it placed there for the advancement of science; nor do we believe Dr. Hartshorne would have allowed it had he known the motives which prompted its introduction.

Dissection, post mortem, about thirty hours after death. Saw body about sixteen hours after death.

External appearances.—Face and anterior portion of the body unusually pale and apparently bloated, swollen, or puffed—the face decidedly so—and presenting an almost translucent and watery appearance, though very calm and composed, and no distortion. Eyes and mouth closed; teeth about one-quarter of an inch apart.

On the inside of lower lip, a little to one side of the median line, and down near the alveolar process, so that it could not have been injured by the teeth, was a distinct, true ecchymosis as large as a dime, and in this was a cut of one-quarter of an inch in length, extending through the mucous membrane and into the tissue beneath; both were evidently produced at or near the time of death.

On the posterior part of the body there was extensive suggillation, nearly two-thirds of the way round and extending from the hips to the head. The blood seemed to have all forsaken the anterior and gravitated to the posterior portion, evidencing its great fluidity.

Post-mortem rigidity and elasticity was remarkable. The entire voluntary system of muscles were so rigid and elastic as to prevent them from being relaxed. The jaws were firmly fixed, the arms and legs would fly back with great force when any attempt was made to flex, extend, or separate them. Upon dissection, the rigidity and elasticity were found to exist only in the muscular structure, and was not in fact simple cadaverous rigidity, since it was noticed by all who saw her when she was "not quite dead," as witness expressed it. The neck was so stiff that in attempting to bend it the whole body would be lifted up. The lips were of a bluish white, and swollen.

All these external appearances were noticed before she was in any degree cold, and perhaps not quite dead, as will be seen by reference to Attorney-General Chatfield's address. The tongue was extremely white, furred, swollen, and indented on the edges, as if by the teeth. The heart was healthy but empty, except a small clot in the right auricle. Lungs healthy and normal—cavas contained about two ounces of dark, fluid blood. Liver healthy and normal, while the gall-bladder was not more than half full. Spleen, kidneys, and pancreas were healthy and normal. Womb was indurated and enlarged very much and adherent about one inch to the small intestine, while the os was ulcerated; internal cavity twice its normal caliber. The ovaries were enlarged to about twice their normal size, while one of them contained a clot of blood half an inch in diameter near its center. The blood contained in the above-named organs had so far gravitated to the capillaries of the dependent portion of the body that during the dissection the hands and instruments were scarcely soiled with blood; while the only blood in these organs was mostly in the cavas, and that in a fluid state.

The dura mater was more than normally adherent to the skull; the arachnoid presented some opacity near the top of the skull; the brain was healthy, while upon its surface it was congested, or its veins were full of blood—slightly congested; the base, and the spinal cord of the cervical vertebræ, were normal and healthy. The peritoneal surface of the stomach and intestines was red and congested. The stomach was contracted to about two inches in diameter, (one-third of its normal capacity,) and thickened by this contraction to more than twice its normal condition. The mucous membrane was thrown, from the contraction of its muscular coat, into folds, and covered with bloody viscid mucus. This mucous coat was at least five to six inches in diameter, and from this, some idea can be formed of its folding or corrugation. The duodenum and all the small intestines were contracted both ways, longitudinally and transversely; its inner coat was highly congested, folded upon itself, and covered with mucus mixed with blood. The jejunum was in a high state of congestion and contraction, its mucous coat covered like the duodenum with mucus strongly tinged with blood. The ilium was considerably congested and contracted, but a little less than the jejunum; the mucous coat covered with viscid matter and more highly tinged with blood. All these portions of the intestines were contracted to about one-half their normal diameter, while the corrugation was strongly marked. The viscid matter had somewhat the appearance of chyle and chyme, while in none of them could there be found anything resembling excrementitious or fecal matter. The cæcum was filled with thin, watery, fecal matter, and

the walls in contact with it were considerably congested; in it were lemon, coriander, and other seeds in considerable quantity. The upper part of the colon contained thin and less watery fecal matter than the cæcum; nearer the rectum it became more solid; the lower part was quite dry and hard. The rectum contained fecal matter dry and hard as if from extreme costiveness. The bladder was quite healthy and empty, but contracted to about two inches in diameter, while its mucous coat was thrown into folds, and its muscular coat was firm and rigid. Its mucous lining was full four inches in diameter.

Hendrickson (the prisoner) stated, when examined before the coroner, that—

"The deceased was in her usual health, and had partaken of her food as usual, but that she had not had a passage for two weeks, and suffered pain as a consequence; that they went to bed between ten and eleven o'clock, talked about an hour; she then requested him to turn over and stop talking, as she wanted to sleep. They went to sleep; between two and three o'clock he was awakened from sleep by the horses kicking in the barn; found deceased lying in the center of the bed, and he against the wall. He thought her dead, and hallooed for the family."

This would leave only three hours from the time he went to sleep to the time of finding her dead, as he says, while the family thought her not quite dead, as will be seen by reference to the moral part of the article. All the organs were healthy and sound as far as organic disease is concerned.

The opinion drawn from the preceding facts by the examining physicians was, that she did not die a natural death; but that it was induced by the ingestion of poison, while, from the analogy of these post-mortem appearances to a great number of animals poisoned by aconite, they gave the opinion that this was the special agent employed. This, conjoined to the chemical analysis, made them more sanguine in their opinion.

The succinct review of the chemical evidence may not be amiss in this connection.

The chemist, "Dr. Salisbury, took a small portion of the stomach of Hendrickson's wife—its mucous surface, and a small portion of the duodenum, and with a portion of the solution obtained from these, he first tested for prussic acid and other poisons, and not detecting their presence, he took another portion of the same and tested for aconite, and the tests indicated aconitine, the poisonous principle of aconite. This, however, did not establish that he had found aconitine. Another process, nay, two other processes, by analysis, were resorted to, and a precipitate was obtained. But this did not establish that he had found aconitine. There was yet another test to be adopted, and the only test, by which the presence of aconitine can be established—*the test of taste.* That was tried. A portion of the precipitate was placed on his tongue. It gave a bitter taste—a sparkling sensation at first, which, in three or five minutes, turned into numbness, producing a stiffness of the surface. *That test established the presence of aconitine,* for there is no other known substance, either in the animal or vegetable kingdom, so all the writers on toxicology assert, which gives this certain and peculiar taste of aconitine. But Dr. Salisbury did not stop here. He enveloped the residue of the solution in pieces of beef-steak and fed it to a cat. In about half an hour she exhibited a choking sensation and swallowing; this was followed by slight contraction of the muscles, twitchings, which moved the limbs slightly, and this by a tendency to vomit. These spasms lasted from one to two minutes; considerable stupor succeeded; she lay down upon her side and breathed heavily, as though she was under the influence of some narcotic. This lasted for some time; it gradually passed off, and in about three hours she was quite natural again. Here again was an indication of poison. To this same cat he subsequently administered the tincture of aconitine, and it killed her in an hour and a half, and the *post-mortem examination of the stomach and intestines of the cat revealed the same precise appearances which those of Mrs. Hendrickson exhibited.*

"In some thirty other experiments with aconite upon cats and dogs, the post mortem revealed the same unmistakable appearances, while no other poison produced any such effects."

The points of moral testimony, as selected from District-Attorney A. J. Colvin's address to the jury at the time of trial:—

The prisoner, John Hendrickson, Jr., is a young man of twenty years of age, of respectable parents, born in the town of Bethlehem, County of Albany, where he has resided since his birth. He married (deceased) Maria Vandeusen, daughter of Lawrence Vandeusen, late clerk of Albany County, and recently deceased. Maria, at the time of her marriage, was seventeen years of age, while at her decease (March, 1853) she was nineteen years of age. She was well educated, accomplished, amiable, kind-hearted, affectionate, and devotedly attached to her parents. Previous to deceased's marriage, Mr. Vandeusen had retired from his lucrative position (as county clerk) with the reputation of being wealthy.

The prisoner considered the connection advantageous to him, and consequently married deceased in January, 1851, although it was opposed

by deceased's parents on account of Hendrickson's well-known bad character. The prisoner and deceased resided with Mr. Vandeusen for some time after their marriage. In the following summer (1851) the prisoner committed a gross assault upon a respectable young lady at Clarksville, (the residence of Mr. Vandeusen.) In consequence of this, the prisoner left and went to Corning. During his absence of three months, his wife was delivered of a child. Soon after his return, this child was found dead in bed under peculiar circumstances, the prisoner occupying the middle, deceased the back, and the child the front of the bed. Soon after this, prisoner communicated to deceased a venereal disease, which was the original cause of her subsequent uterine disease, besides being a source of great mortification. This led to his dismissal from the house of Mr. Vandeusen. During the following fall and winter, previous to deceased's death, her general health became entirely restored, with the exception of the uterine disease before mentioned. This continued to trouble her, probably from some chronic inflammation or weakness.

During the following January, prisoner induced deceased to visit his father's house two or three consecutive times. Again, about the middle of February, prisoner and his sister induced deceased to make a fourth and last visit to his father's house. At this time, it will be seen (by reference to prisoner's testimony) that deceased was in the enjoyment of her usual health, which was good. During a visit to her aunt, on the Saturday before her death, deceased ate heartily, and returned to the house of the prisoner's father in the evening.

The next day, we find her partaking of her usual meals—breakfast in the morning, dinner at three P.M. In the evening she attended divine service, at a church about three miles distant, returned between nine and ten o'clock, read for the family from the Bible and also a religious paper, and retired to bed with her husband about ten P.M.; laid and talked about an hour, and went to sleep at her own request that they should cease talking. About two o'clock A.M. (Monday) he awoke (from noise in the barn) and found her dead, and lying in the center of the bed, at full length on her back, with her hands either crossed or lying down by her side. The bedclothes covering her person, and in all things appearing as if she had been carefully laid out for burial. The prisoner occupying the back of the bed against the wall (a narrow, old-fashioned, corded bedstead at that,) and calling for a light without changing his position, except he sat up as the family came into the room with the light. The room was in the northwest corner of the attic portion of the house. The prisoner and deceased had, until the last night or so, slept on the first or principal story, and in (below stairs) the southwest corner of the house, in which room also slept two of the sisters of the prisoner. For some unknown reason their sleeping apartment was changed, and for two or three nights previous to her decease, she and prisoner slept in this attic bedroom.

Early next morning the body of deceased was removed to her mother's, (about six miles distant.) The prisoner followed the body. On the same day (in the afternoon) a coroner and physician are summoned from the city; a coroner's jury is empanneled, and prisoner's testimony taken the same evening. His relation of the circumstances of deceased's death was so extraordinary that a post-mortem examination was demanded by the jury.

Among other things, prisoner told Mr. Aley (deputy-sheriff) that when he awoke she did not move; he tried to move her with his hands, but she was stiff; and in this connection stated that she was well, and her appetite as good as usual. The following morning (Tuesday) the dissection took place, during which the prisoner was uneasy and anxious to know what the physicians and coroner were doing. He inquired of a person, (whom he supposed knew,) "what they are doing, and what they find?" Being told that they were taking out the stomach, and that it was not known that they had found anything, he remarked: "One thing I do know, they won't find arsenic." The prisoner made another remark to Mr. Aley (deputy-sheriff) when he was about to arrest him; prisoner said: "Suppose they put poison into her stomach yesterday, can it be known or ascertained?"

The week previous to his wife's death, prisoner was in several drug stores about Albany, searching for the most subtle poisons, one of which was prussic acid, but did not find it at the store inquired of, (Springsteed & Bullock's.) On Saturday (as his wife died on Sunday) he went into another drug store, and some time during the same week a person answering the general appearance and dressed in a costume corresponding with the ordinary apparel, etc. of the prisoner,

bought of the druggist Burroughs an ounce of the tincture of aconite; and Burroughs swears he believes the prisoner was the man.

So, also, when prisoner was being examined before the coroner, the evening after his wife's death, he was asked "when he was in Albany?" and answered: "Two weeks ago last Saturday." Upon being further questioned, as if thinking, he finally said: "I believe it was a week ago last Saturday;" while upon being questioned still more closely, he remembered that "it was last Saturday;" (this was on the following Monday.) He stated that his business in town was to take a load of logs to mill, (this mill is about two miles from the city,) and that while in Albany he stopped at several places, but did not mention a drug store; while on being questioned as to whether he was in a drug store on this Saturday, looked up as if startled at the question, hesitated, and finally "did not remember."

In the summer of 1851, following his marriage, he made a promise of marriage to a young lady, (in Schoharie County,) who afterward wrote a note to him at New Scotland, announcing her preparation for the marriage, and urging him to redeem his promise, and this came to the knowledge of deceased. Mr. Van Deusen died on the fourth of October, devising all his property to his wife during her lifetime, and on her death one-half to his son and the other to his two daughters. Prisoner's wife told the prisoner that whatever might come of her share, he (the prisoner) should never have it. After Mr. Van Deusen's death she charged prisoner with being a thief, and with gambling at different places. He (about this time) asked deceased if he should get her some medicine. She answered, no. He urged the request. She again replied: "No! last summer you got me some poison and I would not take it and burnt it up."

In connection with the moral testimony, it may not be amiss to give a few quotations from the address of Levi S. Chatfield to the jury, as embodying his views upon the medical, moral, and circumstantial evidence in this case.

"We find the deceased lying in the middle of the bed; the prisoner sitting up in the back part of the bed; she lying perfectly natural, with her hands folded on her breast, the bedclothes and her own apparel smooth and undisturbed; nothing, in short, to indicate the mortal agony, the death struggle of the separation of soul and body; but there she lies, like natural and peaceful sleep, with not a ripple in her glossy hair, nor the distortion of a limb to show that violence preceded death.

"At this stage of the case we are called upon to show that this death was not the result of natural disease, but that it was the effect of violence. This is deducible from the conduct of the prisoner and the family on that occasion, and the external appearances of the body, as well as from the medical and chemical evidence. I believe this death not to have been a natural one, from the conduct of the prisoner and the family on that eventful night. I ask you to believe nothing whatever with regard to the complicity of the other members of the family in this tragical affair, and I would to God that I could not; but a horrible suspicion has fastened itself on my mind, which I cannot shake off. But the acts of all are important, so far as they bear on the question we are considering.

"You find the prisoner sitting in the back part of the bed, and saying or doing nothing. Counsel says he was paralyzed. How, then, could he call out? Why, gentlemen, who that knows anything of the workings of the human heart does not feel that, had he been innocent, he would have jumped out and rushed for a light, instead of calling for it. But no! there he sat, as calmly and undisturbed, from all accounts, as though it were a dog which lay dead beside him. This fact is full of significance. Now we do not know how long he sat there. There is no evidence of the time. What was the conduct of the family? Not one word was lisped then among them in regard to her death! They did not believe her dead, they say, when they first reached the chamber. They made efforts to revive her, they say, but not one word was uttered among them in regard to sending for a physician, nor for the neighbors, until they *knew* she was dead. Why, gentlemen, what would you do, were you to wake up and find your wife lying as though dead beside you? I am certain that my first act would be to spring out of bed, and my first thought to send for a physician. Dead or not dead, I would see what could be done to revive her; and, whether the physician was far or near, I should send as speedily as possible irrespective of distance; and so would you, gentlemen.

"Another singular feature in their conduct:—What was it that made all these people look under the bed, and look into the chamber, and all know so exactly what were the contents of that chamber? Who would, if they were attending the dead, prowl around in this way? What motive induced them to be so singularly curious about this particular vessel and its contents, and why were they searching the room to ascertain that no vessel of any description was to be found there? Why were they looking for things of this description at all, instead of devoting their attention to the deceased, unless a horrid suspicion provoked this most unnatural curiosity?

"There is another piece of evidence, and it too is significant: what became of the candle with which John went to bed, and which was left for

him on the table in Matthew's room? What became of that candle? for it is sworn that there was no candle there. Now, if there had been a half-burnt candle there, remembering all the circumstances, would they not have noticed and remembered that? Was not that candle employed in concealing the evidences of the night's damning work, and was not this the candle seen by Wendell Oliver?

"Now when she was dead her face was found to be swollen. This is sworn to by those who knew her well. This is important, as characteristic of the effects of aconite. Another is the unusual rigidity sworn to by Matthew and several other witnesses, including the prisoner, and also what the old lady said about the jaws — that she tried to open them, and could not.

"If Matthew is to be believed, there was a marked and unusual rigidity of the muscles; and this is a characteristic of the poison. I care not how much he may now seek to qualify his testimony. She had been dead but a few moments, the body was still warm; and yet he found the limbs stiff. Counsel have tried to explain this, but the attempt seemed very like a cry of woe, 'that all was lost.'

"There is a marked difference between ordinary cadaverous rigidity, always present in a greater or less degree in the dead, and that sudden rigidity resulting from muscular contraction and produced by spasmodic action. This distinction is readily perceived by the practical eye, and is never found in the bodies of those who have died of natural diseases.

"That it existed here, we have the evidence to which I have called your attention; in addition to which you will recollect that the prisoner told Mr. Aley that when he woke up he found his wife *stiff*.

"There is another question bearing upon the pathological evidence in this case, and that is the evidence of Mr. Meads. He says, when he first came in he put his hand upon her heart, and thought he felt a fluttering; but the second time he did so thought he was mistaken. It will be for you to say whether he felt the heart flutter, and it is my opinion that he did. This action of the heart is continued for some time after respiration has ceased (and *vice versa*) in poisoning by aconite, and seems to be one of the characteristic effects of that particular poison.

"The external appearances to which I have thus far called your attention, were all noticed before the removal of the body from Hendrickson's, and within a short period after her death.

"Deceased's mother, Mrs. Van Deusen, noticed an unusual pallor. She says there was rigidity, and also a swelling of the face, around the lower part; and there was a constricted, retracted appearance of the lower jaw.

"Now, upon the hypothesis that aconite produces contraction of the muscular system, these appearances are synonymous with its effects.

"She also tried to move the arm, and, when lifting it, it flew back—this is called elasticity, and almost always accompanies death by the poison of monk's-hood.

"Another thing which was noticeable about the body, and which I say is characteristic of this poison—aconite—is the blueness of the lips, noticed and sworn to by the witnesses.

"There is another thing, gentlemen, which speaks volumes in this case, and it is that ecchymosis, or spot upon the lip. What was it? Where was it? It was a bruise about the size of a sixpence, inside of the lower lip, a little to one side; and it was a cut. Now, how came that wound on the lip? The medical men say it could not have been produced after death; and how came it there? Even had she contemplated suicide, I shall ask you how it came there? for in doing this it never could have occurred. That cut was inflicted when the phial was placed to her mouth; was inflicted when the fatal dose was forced down her throat. The sore lip, which it is said she complained of on Saturday, (if there was a word of truth in that absurd story,) would not account for it, for it was a flesh wound. It has not been accounted for, and, while it stands unexplained, is of fearful moment to the prisoner; it is most pregnant and conclusive evidence in this case, and is one of those incidents which traces out a murder; and it seems as though there was a Divinity which by these things, small in themselves but great in their connection, trace out a murderer and reveals his crime. This bruise tells a fearful tale.

"The conduct of the prisoner and family again become important. Let us recall his position and deportment. When found, he was calmly and quietly sitting up in the back part of the bed, and his wife lying dead before him. This calmness was unnatural; it was such conduct as admits of no explanation on the hypothesis of his innocence; and was altogether too stoical for weak human nature. No feeling, no emotion was manifested. We have no evidence that a tear was shed in that chamber of death. The whole scene speaks of some terrible calamity which, by overwhelming them, had dried up the fountains of grief.

"The counsel says the deepest grief is not loud. But I don't like to see a dry-eyed mourner; I always doubt the man or woman who can see loved ones lost to them, and do not shed a tear. In a true heart the great outlets of grief will bubble up and tears will flow; a true heart cannot restrain the promptings of nature.

"It has been said, by counsel, that prisoner has said she was dead; he had good reasons to say it, and to know it also. He sat there in bed manifesting no emotion or feeling. There he sat and continued to; it is true, he shook her, and said—'Maria! Maria!' Gentlemen, I say this is not natural, not according to the feelings God has implanted in the human heart. If he had murdered her; if he was so hardened as to have poured poison down his wife's throat, I should expect no more feeling from him. I would to God that another horrible feature of this night's

transactions had left no trace on my mind—that I could rid myself of the hideous impression!

"According to the evidence, Matthew came up with a light, and there he stood at the foot of that bed of death, the prisoner sitting up; and there they stood, these two brothers, looking at each other, not one word exchanged between them, not one remark; but there they stood looking at each other!

"Gentlemen, if that chest, on which the prisoner afterward sat, could be made to give up its secret, there, in my opinion, would this horrible mystery be fully unfolded. Doubtless it contained the damning evidence of his guilt; and it was for this reason that he obstinately retained his place upon it. When the neighbors came he still sat there, maintaining an unbroken silence; occasionally, apparently, sighing as described by Mr. Meads.

"The whole proceedings leave an impression which is most painful. If that scene could pass before some magic mirror, we would have a picture such as we may now imagine.

"Now, this man's account of the death of his wife is a strange one. He tells two different stories to Stephen Van Deusen, both in a careless, unconcerned way, as though no wife were dead, and as though she were not then lying unburied beneath her mother's roof. It will be remembered that Van Deusen and the prisoner went from the wood house to the barn, and in a short conversation at the barn he gives two relations of the manner of the death of his wife. In one he says they went to bed at 10 o'clock, and he woke up at 2; and in the other, told but a very short time after that, they went to bed at 11 o'clock, and he woke up at 3. If the story was true at all, there would have been no difficulty in making it a straight and consistent one.

"Now, as to his examination before the coroner's jury, though it reveals matters which are falsehoods in themselves, yet they act as truths in this case. Here he denied being in any drug store in the city the week preceding his wife's death; and when the inquiry was made whether he had been in a drug store in Albany, he gave a singular start which betrayed alarm. Now he had been in one, as has been clearly proved. Gentlemen, when a party raises a falsehood in a case, it is a presumption against him. Why did he deny it? Because he already felt that his crime was suspected, because then the image of his murdered wife came up before him; because he felt that it was a telling fact against him!

"First, gentlemen, the matter of that sore lip is a fabrication; it was all false. That was not the sore she is said to have complained of, and those who swore to it knew so; it was all false from beginning to end; and this bruise is alone accounted for as I have before stated to you.

"The second fabrication was that in relation to John's speaking to his mother in the room in regard to his wife's death. All the witnesses, Matthew, his wife, and Maria, say that no questions were asked, and that not a word was heard there or said about it. I said it was a fabrication; and I verily believe, if the old lady had been called when Maria was, we would have heard nothing of it. But after her examination it was found necessary to patch up something to cover the weak point exposed, and the old lady is made to remember this conversation.

"Another fabrication is about prisoner not being in town on Tuesday, and to prove the falsehood we have three disinterested witnesses. Shall we believe them, or shall we believe those relatives who stand in such a peculiar situation in regard to the prisoner, and who are again brought on the stand, and at a late hour, to swear to it?

"Another fabrication, and this also attempted to be proved at a late stage, was the statement of Matthew, that the day himself and prisoner were in town together, he left prisoner in front of Springsteed's drug store, and went on to the widow Hendrickson's in Pearl Street, where, in about five minutes, he was again joined by the prisoner. Now I say that the prisoner did not go at all to the widow Hendrickson's, or within any such time as Matthew says, for he was seen to come out of the store and go up Pearl Street, and could not have met Matthew within many minutes of that time.

"Now, gentlemen, as to the matter of prisoner's wife eating her meals on the last Sunday. From all the evidence in regard to this, it is very clear that they desire to create a false impression as to her state of health; but it has failed to leave any conviction on my mind that she did not eat her usual meals, and I think it has also failed to satisfy you of its truth."

Extracts from Judge Marvin's address to prisoner:—

"The jury have considered your case with deep solicitude. Your zealous and able counsel have not, for three weeks, sought natural repose before considering the power, force, and effect of every syllable of evidence adduced through the day, nor without endeavoring to anticipate and to prepare for that which might be adduced on the morrow. The Court has been solicitous to commit no error." * * * "My mind has been oppressed and appalled at the magnitude of your crime. It has been said, well and eloquently by counsel here, that the murder of which you are accused was one of great peculiarity. You employed, for the purpose of accomplishing the deed, a deadly poison—an active vegetable poison, peculiar in its character, and difficult of detection; and I greatly fear that he who communicated to you the knowledge of poisoning by aconite, communicated to you also the difficulty of its detection. Relying upon this information, and confident that the instrument of your crime would be forever hidden from human eye, you committed the fearful deed. Empirics and quacks, though they may learn enough to do mischief, and even acquire the requisite knowledge to use as a medicine a deadly

poison without always producing fatal results, often fail in acquiring the knowledge which enables men to avoid evil, and to know the force and power of the material which they use.

"I refer thus prominently to the opinion that there are poisons which cannot be detected, because I desire to impress, not only upon you, but upon all, the fact that as science advances—as it unfolds to the student the great storehouse of knowledge, and lets man penetrate into the very arcana of nature—that, as it advances, step by step, it enables its votaries to detect the most subtle poisons, and to trace the very footsteps of crime. Chemists are enabled now, through the wonderful developments of science—and science detects your crime—to detect almost all poisons, whether vegetable or metallic, to trace out cases of poisoning (no matter what may be the character of the poison administered) with almost unerring certainty. And it is as dangerous to attempt murder with the most subtle vegetable poison, and as certain to be detected, as if the murder were committed with the dirk or the stiletto. Your case may have its moral effect upon community in this view of it. Community should understand that the crime of murder cannot be committed, in this day of light, in any manner or by any means, without leaving the evidence of guilt; and this evidence always points out unerringly the guilty individual.

"But there was left a piece of evidence in the case, which indicates, with a certainty almost unerring, the mode and manner of her death. I do not now allude to the scorched path which has been traced out by science in the alimentary canal—a path scorched by the liquid poison which you administered—but I refer to the mark left upon the lip of your victim. Little, very little has been said about that mark, although it has been alluded to, and commented on by counsel, and very properly. To my mind, sir, it has been the strongest piece of evidence in the case; I will not say strongest, because this might appear to be casting some doubt upon the medical testimony which has been adduced. But it is to my mind overwhelming. Science can tell us whether such a wound occurred before or after death; science, from the indications apparent, says that it occurred before death. That wound was as large as a six or ten-cent piece, and had within it a cut a quarter of an inch in length. What explanation has been given in relation to it?

"We know, however, without the aid of science, the consequences of such an injury. It produces excessive pain in a living subject. If there had been such a wound on the lip on the day preceding her death, every member of the family would have known it. How was that wound produced—how caused? This was a terrible question for you to answer. It has been answered by the jury. It can only be answered on the hypothesis that you inflicted this injury by forcing the fatal liquid into her mouth before death. I refer to this, not for the purpose of bringing before your mind the fearful scene of that terrible night, but for the purpose of inculcating that truthful moral that 'murder will out;' that man cannot shed the blood of his fellow-man without leaving traces by which his fellow-men may detect the crime.

"I will not attempt to paint the scene in that room that night. I hope that no mortal eye saw it or knew aught of it, except yourself and that frail being whom you violently sent into another world—whose spirit took its flight at your command—uncalled and unbidden by its Maker."

Upon this moral, medical, chemical, and circumstantial evidence, the prisoner was convicted of the crime of murder, and sentenced to be hung. A certiorari was allowed by Hon. Wm. B. Wright, on application of the prisoner, and the case was taken to the general term of the Supreme Court for review upon exceptions taken at the trial. After full argument before that tribunal, the Court affirmed the judgment of the Court of Oyer and Terminer, and thereupon the case was, on the application of the prisoner, removed to the Court of Appeals (the highest judicial tribunal of the State) for further review. Here, again, the case was most ably argued; and this Court, after the most careful deliberation, affirmed the judgment of the Supreme Court and the Court of Oyer and Terminer, and returned the case to the latter Court for execution of judgment. Sentence of death was thereupon again pronounced upon the prisoner, and in pursuance of such sentence he was executed on the fifth day of May, 1854.

It will be perceived by this statement that the life of the prisoner was protracted, by the various appeals taken by him, for over eight months after the date first fixed for his execution. During which period, the friends of the prisoner were indefatigable in their attempts to forestall or influence executive action in his favor, by ex parte and unsworn statements and opinions of physicians, all, at least partially, and some we have reason to believe wholly, unacquainted with the medical and chemical appearances upon which the opinions of the medical witnesses for the people, as to the manner and cause of death, were founded. These counter-statements and opinions were not only presented to the governor, but were instantaneously offered to the public through various newspapers with the evident intent thereby to create a false and unfounded sympathy for the prisoner in the public mind, and thus secure another appliance to be used in influencing executive action

(should the opinions themselves fail,) by the agency of public opinion.

We deem it, therefore, not only a matter of interest to the profession, but an act of justice to the witnesses whose evidence was thus sought to be impeached, to copy in this connection such portions of the statements and opinions so used, as seemed perhaps at the time, from the high standing of the gentlemen making them, to have been entitled to consideration, either at the hands of the executive or the public. And in furtherance of this object, also to copy from reviews of those statements and opinions made immediately after their publication, by gentlemen of the highest reputation in both the medical and legal professions.

This trial was reported and published in full by Barnes & Hevenor, a copy of which was transmitted to Prof. Geoghegan, of Dublin, who returned the following able and comprehensive review of the same:—

"Royal College of Surgeons, Ireland,
December 5th, 1853.

"Dear Sir:—Accept my best thanks for the report of the very important case of Hendrickson.

"Having with much care considered the medical facts in their relative bearings, I have to state that they appear to me to establish clearly that the death of Mrs. Hendrickson was the result of the ingestion of poison, while they afford the strongest presumption that the special substance employed was aconite.

"When we find, as in the present instance, a young, and, with immaterial exceptions, previously healthy woman, dying after an illness, at the most, of four hours, and possibly much less; when we learn that five hours before she was discovered dead, she had been in good health and spirits;* when a careful autopsy reveals† an empty state of the heart, slight congestion of the surface of the brain, signs of considerable irritation of the mucous coat of the stomach and small intestines, the remaining organs in a natural state, and the blood for the most part fluid; when, further, by processes which do not generate poisonous matter, a substance is obtained which produces marked symptoms of poisoning in an animal similar in its organization to man, we have, I apprehend, data sufficient to establish the fact of death by poisoning, even though the symptoms were not observed during life.

"In the present instance, the appearances generally tend to show that the proximate cause of death was syncope.* That the last-named condition was not the result of mental emotion, or of mechanical violence, but, on the contrary, of the operation of a powerful acrid and sedative† substance acting on the heart through the channel of the stomach, is proved—1st. By the absence of any sign of violence sufficient to cause death. 2d. By the appearances of irritation in the alimentary tract. 3d. By the observed physiological effects of the substances obtained from the latter quarter.

"The possibility of death from epilepsy, or simple apoplexy,‡ is negatived by the fact that the former never proves fatal on the first access, (and when fatal, with different *post-mortem* appearances,) while the existence of the latter can be suspected in those cases only where the other organs afford no reasonable explanation of the assumed or observed disturbance of the cerebral functions during life. Simple apoplexy, moreover, rarely, if ever, destroys life in four hours.

"The absence of any sign of disease or cause of obstructed venous circulation in the adjacent organs, the empty state of the stomach,§ and the early performance of the autopsy,‖ sufficiently attest that the appearances in the alimentary canal were not of a pseudo-morbid or cadaveric character.

"The foregoing considerations, in my judgment, clearly establish that *Mrs. Hendrickson's death was the result of the ingestion of a narcotic-acrid poison.*

"As respects the special substance employed, the analysis (when collated with the maximum duration of deceased's illness) shows that it was not of a mineral kind. Animal poison is obviously out of the question.

"It, therefore, but remains to consider what vegetable matters are capable of causing death in four hours; of leaving behind in the stomach and small intestine marked signs of mucous irritation; of producing, when applied to the tongue, an acrid taste, followed, after an interval of some minutes, by a sensation of numbness, and when

* Witness Louck, Report, p. 26.

† I consider the condition of the gall and urinary bladder, the alterations in the uterus, in the cerebral arachnoid, together with the characters of the rigor-mortis, as quite unessential elements in the inquiry.

* I could cite numerous cases in which the cavities of the heart have been found empty, while the symptoms clearly indicated death by syncope. Five are given by Dr. Wright, (Pathological Researches on Suffocation and Syncope.) Some also in Lancet and Medical Gazette. The presence of blood or fibrin and clots is, according to my experience, to be expected only when the syncope has been partial, and life prolonged at least for some hours. In Mrs. Hendrickson, syncope may have supervened rather suddenly, as the sequel of other effects of the poison, and speedily terminated life, especially if the dose was considerable.

† Vide Fleming on Aconite, p. 43, as to the influence of the poison in producing death by syncope.

‡ From the present state of knowledge on this subject, it is probable that some, at least, of the cases described by Abercrombie, were in reality instances of narcotic poisoning, or were symptomatic of Bright's disease of the kidney.

§ In reference to objections on the score of coloration of the mucous membrane and mucous by gravity, putrefaction or the presence of colored contents.

‖ The admixture of the matters, obtained by Dr. Salisbury, with meat, was likely to have diminished their activity, both by enveloping the poison, and perhaps in part by the action of the gastric juice in modifying the influence of the latter. (Vide Fleming's Experiments, loc. cit., p. 104.)

administered, even under unfavorable conditions,* to a cat, giving rise to choking, efforts to swallow and vomit, muscular twitches, prostration, and well-marked stupor? I know of none but aconite, or its active principle, aconitine.

"The difficulty, if not impossibility, of separating completely animal matters soluble in alcohol, from vegetable active principles dissolved in the latter, renders, in my opinion, Dr. Salisbury's experiments with acids on the alcoholic extract of the tissues, especially if taken *per se*, less conclusive than they might otherwise prove, and the doctor appears to have exercised a wise discretion, in reserving the small quantity of the poison at his disposal for the important physiological experiment detailed in his able evidence, instead of expending it in the attempt at identification, by endeavoring to elicit the entire series of reactions which, even when yielding affirmative results, does not, perhaps, of itself suffice to establish the presence of the alkaloid.

"The evidence, therefore, of the presence of aconitine in the case before us, rests conjointly on the sensible properties, (appearance and taste,) the physiological action of the substance obtained, and the identity of the appearances observed in the stomach and small intestine of deceased with those to be found in the corresponding organs of animals poisoned by aconite.

"The presumption created by this evidence falls little, if at all, short of certainty. The preceding appears to me to constitute the legitimate judgment on the medical facts; the jury, however, drawing their conclusions from the entire body of evidence, are clearly entitled to affirm, by construction, the certainty of the special agent presumptively indicated by competent medical testimony.

"That the poisoning, in the last place, was homicidal, is rendered probable to the medical inquirer by the existence of contusion and laceration on the inside of the lower lip, by the posture, covering and *locus in quo* of the body, and, negatively, by a consideration of the previous state of mind, habits, and conduct of deceased as they appeared in evidence.

"To determine the perpetrator of the poisoning, (although occasionally, under peculiar circumstances, falling within the range of medical inquiry,) was, in the present case, exclusively the province of the jury, the soundness of whose verdict there appears no reasonable ground to question.

"The mode in which the case was investigated by the medical and legal authorities reflects much credit on both.

"I remain, dear sir, faithfully yours,

T. G. GEOGHEGAN, M.D.,
Professor of Forensic Medicine,
Royal College of Surgeons, Ireland.

"Dr. Swinburne, Albany, N. Y."

The following review of the letter of Alonzo Clark, Professor of Pathological Anatomy, N. Y., by A. J. Colvin, District Attorney of this county, was published May 1st, 1854, *Journal, Argus*, etc. In this review it will be seen that Mr. C. makes no attempt at elucidation, but confines himself to Dr. Clark's abuse of medical witnesses. The reviewer says:—

"The letter in its very inception is deceptive—it is addressed to our eminent townsman, Dr. T. R. Beck, and one would be led to suppose, from its phraseology, that Dr. Beck had requested his opinion in regard to the Hendrickson case. I am assured that this an utter fiction, and that so far from Dr. B. asking Dr. C. for his opinion, he never thought of such a thing, and did not know of the existence of the letter until he saw it in print. The opinions of Dr. Beck upon the Hendrickson case are well known, and he has never disguised but often expressed them. He believes that Mrs. H. came to her death by violence—that the violence employed was poison, but that the poison was prussic acid, and not aconitine. In this I think he is mistaken, but that is matter of little moment, whether the poison were prussic acid or aconitine; in either case the conviction was right. But to return to Dr. Clark. He will not say that the medical witnesses for the prosecution have produced the condemnation of an innocent man. With his guilt or innocence, 'he has nothing to do.' Why not? If the medical witnesses for the prosecution were wrong, then Hendrickson was unjustly convicted, and the medical witnesses produced his conviction. What was his motive in writing the letter if it was not to overthrow the people's medical witnesses? Dr. C. admits that *if the presence of aconite in the blood, stomach, and tissues were conceded, the post-mortem appearances would sustain such admission—in other words, that the post-mortem appearances were just such as aconite would produce.* Is not this precisely what Dr. Swinburne swore to—neither more nor less? But Dr. C. thinks Dr. S. abused the confidence with which courts of justice so often compliment the men of science, because without having found the aconite in the blood, stomach, und tissues, he yet ventured to express the opinion that it had been present, which Dr. C. would not have done until after it had been found, although the marks were unmistakable that it had been there!

"Dr. C. says that the condition of the stomach, intestines, gall-bladder, urinary bladder, muscu-

* It is obvious that a comparatively large quantity of the poison (and in a very pure condition) would be required to establish that the substance obtained was a white, translucent, granular, non-crystalline mass, unalterable by air, destitute of smell, having a bitter, acrid taste, followed after an interval by numbness of the tongue; fusible, not volatile, but giving out ammoniacal vapors by sufficient heat; with difficulty soluble in water, readily in alcohol or sulphuric ether, the solution having an alkaline reaction, forming with acids uncrystallized salts, which are precipitated white by ammonia and by potash, (the precipitate insoluble in latter,) sulphuric acid dissolving it with yellow color, followed on application of heat by a dirty, amaranth red, not colored by nitric acid. The solution colored kermes by tincture of iodine, precipitate white by tincture of galls, yellow by tannin, not by chloride of platinum. It is probable that the animal charcoal in Dr. S.'s experiment retained a good deal of the poison.

lar system, and face, as described by Dr. Swinburne, do not belong to poisoning alone. This is a grave assertion, but assertion only—it is unaccompanied by a particle of proof, and without reference to a single authority. The same thing, I know, was asserted on the trial, but it was denied by the prosecution, who contended, and contended successfully, that although some of these appearances, taken singly, might exist in a case where there was no poisoning, yet that altogether they were never known to exist, and never had existed, except in a case of poisoning. Taylor, in his great work on poisons, says that there is no *one* symptom peculiar to poison; but, at the same time, there is no one disease which presents *all* the characteristics met with in a special case of poison. So here—although the defense had free access to the extensive libraries of Drs. Hun and Armsby, and although Dr. A. furnished several books to Mr. Wheaton on the trial, to sustain the position of Dr. C., yet not one of them came up to the mark—they sustained the position of Taylor—no more, no less; and Mr. Wheaton was obliged to abandon the ground in despair. *Dr. C.* will confer an especial favor on the benighted public of Albany, if he will show any disease to which the human frame is subject which has ever produced and presented all the morbid appearances described on the post-mortem examination of Hendrickson's wife.

"Dr. C. also believes that the congested and contracted stomach covered with reddish mucus, the contracted and congested duodenum, the empty state of the small intestines, the half emptied gall-bladder, the extreme pallor of the face, the slightly swollen tongue, afford no evidence that vomiting had occurred before death, and such would be the unanimous verdict of a jury of intelligent physicians. But suppose the doctor were to add to these the facts that the deceased had been in previous good health, had died suddenly, after having, in the language of Hendrickson before the coroner's jury, partaken of her usual meals, that she had partaken of four meals on the day previous to her death, and two meals on the day of her death, that she was of a costive habit of body, and that she had been without a motion of the bowels for several days, what then would the intelligent jury of physicians say? I will answer. Were they then to render a verdict that she had not vomited, every man of common sense in the community would hoot at them as a lot of miserable dolts.

"If the wife of Hendrickson did not die of poison, Dr. Clark says he will hint at a conjecture for the cause of her death. It is *possible*—mark, he says, I do not say it is *probable*—that her death may have been caused by UREA. Now, what is urea? It is one of the constituents of the urine. When there is a disease of the kidneys, which prevents them from acting so as to carry off this urea, it is retained in the system, poisons the blood, and sometimes causes death. It is ordinarily a disease of long standing, preceded by stupor, somnolency, coma, and sometimes paralysis; and if not relieved terminates in death, after days of sickness. But upon the post-mortem examination all the organs will be found healthy except the kidneys—*no such appearances will be found as those presented on the post mortem of the wife of Hendrickson.* And, if Dr. C. had read the evidence of Dr. Swinburne, he would have seen that the kidneys of the wife of Hendrickson were sound and normal.

"Thus ends Dr. Clark, and with him every remnant of doubt is removed, if any remains in the minds of even the most skeptical, as to the guilt of Hendrickson. The very fact that, after so much effort, and such boundless expense, no evidence can be found to shake or lessen the force of the people's case made upon the trial, furnishes proof of the most conclusive character, that the verdict of the jury, which pronounced the doom of Hendrickson, was righteous and true, and will stand the infallible test of time. A. J. C.

"NOTE.—It will be remarked that I have paid no attention to certain resolutions purporting to have been adopted by the New York Pathological Society, on the 26th of April last, of which Jackson Bolton was President, and J. Foster Jenkins, Secretary, for the reason that they give no grounds in their first resolution for the opinions expressed therein; and because, in my comments upon the letter of Dr. Clark, I have shown, I think, beyond question, that the wife of Hendrickson did vomit before death, and in my comments upon the chemical statements of Dr. Hayes, that she was poisoned by aconite, which furnish an answer to the positions of that resolution.

"The second and last resolution of this learned society asserts that Dr. Swinburne omitted altogether to examine the trachea and larynx, affections of which are known to produce sudden death. Now, Dr. S. swears that he has described *every* organ of the wife of Hendrickson as sound, so far as organic disease is concerned, except the womb. But suppose that he had not, will this very wise body of men tell us of a case where disease of the larynx and trachea made its appearance suddenly, within three or four hours proved fatal, and left behind it, on the post-mortem examination, the excoriated and terrific appearances in the stomach, intestines, gall and urinary bladders, which were presented by those of the wife of Hendrickson? A. J. C."

Let us see what Judge Marvin, who presided, says, in speaking of the condition of the intestinal track, lip, etc.: "Thus, if you were to go into a field, and see the tracks of a horse, you would at once say that a horse had been there; yet you have seen no horse in the field. The tracks are the circumstances from which the main fact, the previous presence of the horse, is inferred." And in reference to the dissection, post mortem, in contradistinction to Dr. Clark, he says: "These witnesses might have been called, and simply stated that they made an examination, and then have given an opinion as

to the cause of death. But the proper course was the one that has been pursued, namely, giving a careful description of all the morbid appearances, so that other anatomists and medical witnesses might, from the description of the morbid appearances, be called, and allowed to give their opinions as to the cause of death."

I will add, in this connection, the points of especial importance contained in a review of the letter of David A. Wells and others—written and published in the daily papers of this city—at the time the publication of these ex parte statements were made to his excellency, Governor Seymour. I will quote from the reviews published in the daily (Albany) journals of May 1st, 1854, (since Mr. Wells sees fit to parade a perverted statement of this case in one of the small public school chemistries of the day.) The review says:—

"Mr. David A. Wells, whose residence rumor ascribes to be in the highly intelligent and moral Commonwealth of Massachusetts. Who or what he is, we have no reliable information aside from this. Perchance he is a 'respectable physician,' *par excellence.* A philanthropist he undoubtedly is to travel so far on an errand so foolish. He will hereafter be known in this State, if in no other capacity, as that of a somewhat conspicuous not to say ridiculous tool of a clique of designing men, who have made themselves quite generally known in this community. As Mr. Wells makes no point save as chief spokesman, we pass him by for the present.

"We next have the communications of Drs. C. T. Jackson and A. A. Hayes, assayers to the State of Massachusetts. The former is of *opinion,* from the mere reading of the testimony as reported, that the 'presence of aconitine in Mrs. Hendrickson's stomach was not demonstrated.' The latter condemns, totally and unqualifiedly, all the processes by which Dr. Salisbury obtained his results, and, as a matter of course, the results themselves. But what is still more strange, he in one paragraph says: 'The detection of aconite in the fluids operated on is not a matter *dependent on skill;* it is chemically an impossibility from the known character of the body itself.' In another he says: 'But *some* result was obtained, and it accords with experience that both *phosphate* and *lactate* of lime would have been carried from the fluids of the stomach and organs, and would have appeared as the precipitate described. At this point in the analysis, the most convincing evidence might have been accumulated. A substance removed from nearly every other body offered itself for examination undisguised. *Here, when the chemical methods applied would have answered all questions, and forever silenced all doubts, we find the subject unexamined further chemically.*'

"Starting with the wholesale assertion that the chemical detection of aconitine in the animal fluids is impossible, and after condemning *in toto* the processes of Dr. Salisbury, he closes his strange epistle with the remark that, at a certain stage in one of the very processes, 'the most convincing evidence might have been accumulated, and that the chemical methods applied would have answered all questions, and forever silenced all doubts, etc.' The difference between these statements of the learned doctor, and *flat contradictions,* does not readily appear. For the information of this Assayer to the State of Massachusetts, he is referred to the opinion of a gentleman upon this very subject, to whom, without doubt, he will agree with us in ascribing the highest possible character as authority in this matter. That gentleman is Professor Geoghegan, of the Royal College of Surgeons, Dublin. After referring to the difficulty of a *complete* separation of animal matters soluble in alcohol, from *active vegetable principles* dissolved in the latter, Professor Geoghegan remarks that 'the evidence of the presence of *aconitine* in the case before us rests conjointly on the *sensible* properties, (appearance and taste,) the physiological action of the *substance obtained,* and the identity of the appearances observed in the stomach and small intestines of deceased, with those to be found in the corresponding organs of *animals poisoned by aconite.* The presumption created by this evidence falls little, if at all, short of *certainty.*' The professor characterizes the evidence of Dr. Salisbury as able, and the judgment of the jury in the case as legitimate on the testimony presented. It is quite generally admitted by members of the profession that Professor G. is the highest authority living upon the subject of vegetable alkaloids, to which he has given unusual attention. How his judgment and opinions will weigh against those of the State Assayers of Massachusetts, is left for that 'Highest Court,' intelligent public opinion, to decide."

"The next prominent individual who speaks for himself in the demonstration, is Professor Lawrence Reid, of No. 78 West 27th Street, New York. Professor Reid was a witness on the trial, and is one of those to whom reference has already been made. On this, his second appearance before the Albany public, he finds it necessary to bring a testimonial from the Hon. N. Bowditch Blunt, District Attorney of New York. He feels that he is treading again upon ticklish ground. He has not forgotten the figure he made upon the witness' stand, and as the singed cat dreads the fire, he thought he would cover himself with the mantle of District Attorney Blunt, before he made another venture. But all the mantles of all the district attorneys in the world will not help him. The jury disposed of him, and decided that, however eminent a position as a chemist he occupied in New York, and whatever personal and official opportunities of testing his accuracy as a chemist and his worth as a man Mr. Blunt may have had, yet that in attempting to overthrow the impregnable position of Dr. S. he utterly failed, and stood confounded and overwhelmed.

"We have next to pay our respects to our somewhat eccentric friend, Doctor E. Emmons, of this city, who was also a witness for the defense, on the trial of Hendrickson. The principal features of the doctor's address to His Excellency are—1st, Pathetic; 2d, Homiletic; 3d, Scientific; 4th, Historic; 5th, Demonstrative; 6th, Instructive; and, *generally*, the production is a non-neutral, double compound known in some nomenclatures as *special pleading*. The doctor's zeal certainly has got the better of his discretion. He has evidently formed his conclusion in the outset, and then ran rampant through a long labyrinth of both physics and metaphysics to find props with which to sustain it. Let us examine him a little. The doctor, with one fell swoop, attempts to annihilate both the chemical and medical testimony offered by the people on the trial of Hendrickson. This chemical testimony was given by Dr. J. H. Salisbury, who was for a time an assistant to the doctor. The medical evidence for the people was principally given by Dr. John Swinburne. Dr. Emmons, in his review covering this whole testimony, aims all his shafts at the devoted head of Dr. Salisbury, whose name is paraded in the doctor's paragraphs something like *eighteen times*. Those who understand the relations of the parties are not at a loss to understand the main point of the wordy address thus ostentatiously paraded before the governor and the public. So utterly blinded did he become to the results of his tests and analysis with aconite, that *he actually swore upon the trial of Hendrickson that a man could drink a pound of the tincture without doing him harm!*

"I shall spend no time in combating the positions of these gentlemen, as they have added nothing to their statements in court. I will only ask why has this formidable demonstration been deferred to this late day? Why has this volcano of 'science' and 'humanity' been allowed to slumber for a full year, while the case of Hendrickson has been prominently before the courts and the people? Why is it now so ostentatiously *erupted*, to the astonished gaze of 'the public who have taken a deep interest in this case from the commencement, and who should have been rightly informed' before now, 'respecting' the merits of the case, of which it suddenly appears they are profoundly ignorant?

"But why is this movement sprung upon public attention at this late period of time? Some of these witnesses have undertaken it to save—not poor Hendrickson—but themselves. It is deferred to a few hours before the execution, in the hope of inducing the hasty and favorable action of the executive by an imposing array of 'distinguished names,' or of beguiling the wretched victim of injured justice, to the last, with expectations of executive interference that no confession should come to sweep away every shadow of doubt respecting the testimony of other important witnesses opposed to the instigators of this farce.

"How it is that so many back tracks have been taken, so many revolutions performed, how it is that so many of the faculty in our city, who have previously had *no* opinions, or whose opinions were 'all in their books,' or whose opinions of the medical testimony for the people were once favorable—how all these gentlemen have gone through, so suddenly, the gigantic mental labor of reading and concurring with the opinions of this Dr. A. Clark, is a problem which we shall not now attempt to solve. To one who has closely observed this whole case, with all its attendant scenes and circumstances, the spectacle presented by this last exhibition of gymnastics is truly and emphatically ludicrous.

"We submit that in regard to some documents presented in this remarkable performance, their tone and spirit are not such as befit the cause of truth, or become men who hold themselves up as the representatives, the embodiment, and the defenders of science. The time, the manner, and the temper of this onslaught are conclusive evidence that the cause of truth, of science, of humanity, and of justice, is the last object at which the real concoctors of this scheme have aimed. How far these formidable names will influence public opinion and executive action under the circumstances, we shall soon be able to learn. We doubt the success of the scheme. It is very well plotted but badly executed. The side issues are too unwittingly displayed. Its real objects and aims are too transparent and too contemptible either to merit or meet with favor from any quarter."

In addition I will give the minutes of a case of poisoning by this substance, which in its post-mortem appearances, so far as observed, is quite in keeping with the observations in this case.

In the Medical and Surgical Reporter, vol. iii. page 557, will be found a case of accidental poisoning by taking a teaspoonful of the tincture of aconite, the symptoms of which were manifested soon after taking it. The characteristic burning in the mouth and throat was felt, followed by great pain and distress in the epigastric region; general numbness and feeling of cold; pulse quick and thready; extremities very cold, nails blue; restlessness so extreme as to prevent the restoration of warmth; some purging—*vomiting continued even to exhaustion;* deglutition soon failed. Heart ceased, and he died from paralysis of this organ in three hours from the taking of the poison. Upon application, the doctor kindly presented me the following additional points, which may not be uninteresting in this connection:—

"Immediately after swallowing the dose (tincture of aconite) a burning, tingling sensation (in mouth and throat) was felt; patient at once had recourse to salt and warm water; vomiting followed; fifteen minutes afterward he took ipecac.

and vomited more freely. With the view of quieting spasmodic action, I gave brandy and almond emulcent. He suffered extremely from spasm of the diaphragm—general numbness and cramps in the lower extremities. The heart's action first suddenly ceased; respiration, or attempt at respiration, continued for a few minutes after; surface of body presented an appearance of 'general pallor.'

"*Dissection post mortem.*—Brain not examined; lungs healthy, some relics of former pleurisy; heart hypertrophied; liver large and congested; gall-bladder small, with a moderate amount of viscid bile in it; stomach much contracted, its mucous coat thickened and congested; intestines were not examined beyond the duodenum; urinary bladder empty and contracted; heart and large vessels were full of loosely coagulated blood."

He further adds, "that the pallor, rigidity, state of stomach, gall and urinary bladders were all in accordance with your observation; but the blood was not quite so fluid. I feel truly obliged for the report of that most important trial, (Hendrickson.) I have read it carefully, and entirely concur with Attorney-General Chatfield in eulogium of medical witnesses for the professional talent and research displayed by them in that extraordinary case."

In conclusion, I will take the liberty of calling attention to certain appearances *post mortem*, some of which I am inclined to believe are common to aconite and strychnia, such as *rigor mortis* and a certain degree of elasticity of all the muscles, which manifests itself when and even before life is quite extinct. This same spasmodic action is extended to the hollow viscera, *i.e.* intestinal track, gall and urinary bladders, heart, etc., which remain contracted for some time after death.

I lately made the dissection of two cases of poisoning by strychnia, where these appearances were very prominent. By reference to the recent cases of death by this substance, *rigor mortis* is noted in the reports as very remarkable, even where the circumstances were unfavorable for its production. I will call attention to the following points as the attendants of death by aconite. The extreme pallor, slight bloating of the face, excessive and prolonged vomiting, (of viscid mucus or bloody mucus, even unto exhaustion,) the frightful convulsions, opisthotonos, tearing of the face with the hands, the clinched jaws, numbness of the extremities, prickling and burning of the tongue and fauces, the profuse cold and clammy perspiration, the spasmodic breathing, frothing at the mouth and nose, the constant retching and spasm of the diaphragm, the comparative loss of vision, the entire retention of consciousness and a fearful contemplation and dread of the approaching end, the empty state of the stomach and small intestines, and instead of fecal matter is found viscid mucus or slime, or bloody mucus adhering to the mucous coat.

The following effect of full poisonous doses, from the prize essay of Reil, may not be uninteresting in this connection:—

"The vertigo is so great as to render it impossible to walk without staggering; the individual is afraid of falling, and actually falls. The sight is diminished in proportion as the pupil is dilated. At the same time the countenance is pale and full of anxiety, the voice is weak, and a tone of anxiety with fear of death sets in. The pulse becomes decidedly less frequent and weaker, being about forty a minute. The nausea is followed by vomiting, which is succeeded by excessive exhaustion, such as sets in after great loss of blood. After very large doses, the peculiar poisonous symptoms of the drug set in. The distress and vomiting of variously-colored, often bloody, bilious fluids, pain in the abdomen, meteorism, diarrhœa, with tenesmus, are the precursors of the quickly approaching condition of agony. Giddiness and obscuration of the senses give way to complete syncope; speech, hearing, and sight disappear entirely; the respiration laborious and rattling; the pulse and beating of the heart exceedingly weak, scarcely perceptible, irregular and rather accelerated than slow. The countenance assumes the appearance of the facies hippocratica; the skin all over the body is pale, wrinkled, and covered with cold perspiration; general trembling of the muscles, and light convulsions set in, and death takes place from paralysis of the heart and lungs. The more abundant the aconitine in the preparation employed, the more prominently stand out the depressing influence upon the nervous system."

T. G. Geoghegan, Professor of Forensic Medicine, Royal College of Surgeons, Dublin, has given the history of four cases of poisoning by aconite, three of which proved fatal. The symptoms (not noted by himself) and appearances post mortem, are noted more carefully (by him) than any others I can find on record, though not as full as I could desire, or as full as their importance requires. In the McMeighan case, a *moderate* and not *fatal* dose was administered; while in the McConky case, the quantity eaten was great, and hence the symptoms were more severe and sooner manifested themselves.

In the first, about ten minutes after taking the poison McMeighan experienced a burning in his mouth, throat, and gullet; sensation of numbness,

fullness, creeping in the skin; swelling of the face; distressing restlessness; imperfect vision; stupor, etc.; afterward became speechless; frothing at the mouth; hands and jaws spasmodically closed; occasional syncope; in the course of an hour he vomited and some purging followed, which continued for some time, (from tea-time to between eleven and twelve o'clock, when seen by his physician he was still vomiting,) accompanied with great tenderness of the belly, and *cramps*, (spasm of diaphragm.)

In the second and fatal case, the dose was very large, the symptoms (so similar as not to require a special description) commenced sooner, spasm, vomiting, frothing at the mouth, loss of vision, etc. sooner, while death followed in little over three hours.

Post mortem is entirely in accordance with the case of Hendrickson: Stomach empty, mucous coat smeared with yellowish-gray mucus, muscular coat well developed; small intestines empty, except that they contained a considerable quantity of brown mucus of the consistency of thickly-boiled starch, and chiefly adherent to the lining membrane.

A third fatal case by the same author, where the symptoms prior to death were the same, (death following in about four hours,) while the œsophagus was reddened, and stomach and small intestines empty, and the whole mucous surface covered with viscid mucus.

His fourth fatal case, (in which death took place in about four hours;) the symptoms in life were similar to the others reported by him. No dissection post mortem.

Here are three fatal cases all having the same symptoms during life. Two of them presented, on dissection, empty stomachs and small intestines, and in the place of fecal matter was a viscid mucus, notwithstanding the poison was taken with the meals.

In my experiments on animals all the post-mortem appearances spoken of in the Hendrickson case were a complete counterpart in every particular. The analogy in Dr. McGrath's case, the two cases of Geoghegan, the animals, etc., to that of Hendrickson are so remarkable as to make it exceedingly doubtful about its being a mere coincident. Appearances post mortem of the hollow viscera are so remarkable in the animal, so far as my observations have extended, and so in keeping with all experience where any reference has been had, that I am constrained to draw the attention of the profession to certain facts, in hopes that some reliable data can be obtained for future observers. The mode of death may exercise some influence as to the appearances post mortem; for instance, death by spasm and exhaustion on the one hand, and on the other syncope. In elucidation of this point, I have condensed the reported cases from Dr. Reil's prize essay, published in 1854, in which I find forty-five cases where aconite in its various forms and a variety of doses had been taken. In all, the effect and symptoms are nearly identical, so far as any note was recorded of them; while dissections post mortem were so imperfectly noted as not to be entirely conclusive. The conditions ante mortem are in many instances carefully recorded, and are essentially in accordance with my observations made on the animal.

Spasm.—Thirty-two of the forty-five were mentioned as having frightful spasm of the hands, feet, diaphragm; some opisthotonos; in others, rigidity of the muscles of the back, neck, etc.; pupils contracted, or dilated; eyes fixed, or apparently protruded; jaws and fauces rigid; imperfect respiration from spasm of glottis, etc.

Vomiting.—In thirty-seven cases vomiting was profuse and prolonged, in some several hours, of viscid mucus, frothy matter, bloody slime, etc.

Face Pale.—In sixteen cases the face was noted as pale, cold, and clammy; as was also the body covered with cold perspiration.

Face Bloated.—In several cases the face was described as being bloated.

Purging.—In eleven cases purging was mentioned as occurring, and in some severe, and particularly during the stage of syncope.

Deaths.—Of the forty-five cases there were eighteen deaths occurring from one to six hours from the administering of the poison; only one of the eighteen lived more than four hours. Of these, five died in three hours, two in four hours, five in two hours and a half, two in one hour, one in two hours and a quarter, one in six hours, and two in two hours, (Mrs. Hendrickson probably lived three hours.) In all these cases the severity of the symptoms was in a direct ratio to the quantity of poison taken, while all vomited where life was prolonged beyond the first depressing or syncopical effects of the poison, whether an emetic was administered or not. Of the whole forty-five cases, none are noted as not having vomited, while cramps, etc. were always present and alternating with temporary syncope. From

the history of these, I judge all died from the exhaustion or syncope induced by long and continued retching, vomiting, and cramps.

I have been thus particular in order that other observers might note more carefully their cases, and thus obtain more positive data.

The importance of the subject demands that nothing should be left to chance. The difficulty of positive chemical analysis makes the importance of post-mortem appearances more manifest, while to my mind the points above alluded to are really of such a character as to make them essential elements in the inquiry. At all events, I will present them to the profession for future consideration and observation.

Palatine Defects and their Treatment.

By James E. Garretson, M.D,
Of Philadelphia.

Diseases of the Mouth—*Continued.*

The Levator Palati.—This muscle arises from the petrous portion of the temporal bone, passes into the interior of the pharynx, and then descends obliquely downward and inward, spreading its fibers out over the posterior surfaces of the soft palate as far as the raphé.

The action of the fifth and last muscle, the azygos uvulæ, it is perhaps not absolutely necessary to consider—its influence, for separation of the wound, being very trifling.

Section of the levator palati is thought to be most easy of performance after the manner suggested by Mr. Pollock. This gentleman first puts the flap on stretch, and then, with a double-edged knife, makes an incision through the soft palate, just on the inner side of the hamular process. The handle is now alternately elevated and depressed, a sweeping cut being made along the posterior surface of the soft palate.

The other anatomical elements of the soft palate are glandular structures, vessels, nerves, etc., all associated, more or less intimately, by connective tissues; but these need not be particularly referred to, as one could not well dissect out the muscles without necessarily familiarizing himself with them. Thus, then, we understand the surgical anatomy proper of the parts—the anatomy as it has relation to cleft palate.

The operation of staphyloraphy was first practiced by a dentist of Paris, La Monier, if I remember the name rightly. It has for its object the bringing together the separated portions of a cleft soft palate, and the retention of the parts in apposition until nature shall unite them.

The operation consists of four different stages, with an object to be attained by each stage:—

1st. The paring off the edges of the cleft.

2d. The introduction of ligatures.

3d. The bringing together of the freshened edges, and fixing the ligatures.

4th. The relief of any tension on the ligatures that may attend the approximation of the parts.

These are the steps or stages, and to accomplish them various means and instruments have been devised, some good, some bad, some indifferent. The reader curious in such matters will find an admirable and most instructive chapter on the subject in the System of Surgery, published in 1851, by Professor H. H. Smith, of the University. In the chapter therein devoted to staphyloraphy, is given a synopsis of the operations as practiced by surgeons whose names have been and are particularly associated with the subject.

An epitome may be made of this chapter by noticing that the operation first suggested by La Monier, in 1764, was revived by Graefe, of Berlin, in 1817, but first methodized and published with the rules for its performance by Roux, of Paris, about 1819. In 1820 a nearly similar operation was performed by Dr. John C. Warren, of Boston, he being at that time ignorant of the views or operations of other surgeons. In many respects the steps proposed by Drs. Warren and Roux correspond, though the means suggested by Dr. Warren are simplest — the operation of the latter being, however, generally regarded as the basis of the various modifications that have since perfected the proceeding.

The instruments prepared by Roux for performing the operation are alluded to as being sufficiently complicated. To execute the manipulations he seated his patient before a strong light, with his head thrown back and supported against the chest of an assistant. The mouth being kept widely open, by means of a cork placed between the molar teeth. The surgeon then placed himself in front, and, with forceps held in the left hand, seized the right lip of the fissure. With his right hand armed with a needle-holder, he next introduced the point of the needle from before backward behind the uvula, in order to traverse the flap from behind forward, at three or four lines from the free edge of the fissure. The needle being thrust in as far as its head, was then

freed from the needle-holder, and seized at its point by forceps, which drew it and the ligature through into the mouth. After permitting a few minutes of rest to the patient, the same manœuvre was practiced on the left side of the fissure with the other needle of the same ligature, the two ends of which were thus brought out into the mouth. In passing these ligatures, M. Roux commenced with the lowest, next passed to the highest, and ended with the middle.

The next step in the operation of Roux was to freshen the edges of the fissure. This he accomplished by seizing the margins, as before, with his forceps, and paring from behind forward.

To tie the ligatures this surgeon commenced by knotting the middle one with the fingers, and after making a simple knot, confiding it to an assistant, who held it with an instrument termed by the French a serre-nœud, (knot tier;) he then passed on to the second ligature, and from that to the first, drawing them tighter than is necessary to approximate the edges of the wound, in order to prevent any separation. Eating, drinking, and speaking was interdicted the patient for from two to three days, the ligature being removed on the third or fourth day, excepting the lowest one, which was allowed to remain twenty-four hours longer than the other.

Dr. John C. Warren performed the operation as follows: the patient being well supported and secured, a piece of wood, an inch wide, a little curved at the end, and with a handle to be held by an assistant, was placed on the molar teeth of one side, to keep the mouth open. A sharp-pointed curved bistoury was then thrust through the top of the palate, above the angle of the fissure, and carried down on one edge of the cleft to its extremity, and the same was done on the opposite side, so as to cut out a piece in the form of a letter V, including about a line from each edge. Next a hook, or curved needle, fastened in a handle, with an eye on its extremity, and a movable point armed with a triple thread of strong silk, was passed doubled into the mouth through the fissure behind the palate, and the latter pierced by it one-third the length of the fissure from the upper angle of the wound, so as to include about three lines of the edge of the soft palate. The eye, with the ligature being seen, was seized by a common hook, and drawn out. The eyed hook was then drawn back, turned behind the palate, and the other edge transfixed in a similar manner. A second and third stitch was now passed in a similar manner, the third being as near as possible to the lower end of the fissure. Then, seizing the upper ligature with the finger, the knot was tied without using a serre-nœud, and placed on one side of the wound in order to prevent its pressing on the fissure; the other being tied in like manner, and the fissure closed.

After the first operation of Dr. Warren, Dr. A. H. Stevens, of New York, September, 1826—see *North American Medical Journal*, vol. iii. p. 233—operated successfully, by first inserting the ligatures, and then paring the edges.

In 1827, Dr. Mettauer, of Virginia, operated for staphyloraphy, and in 1837 published an excellent essay. Dr. M. employed leaden ligatures—see *American Journal of Medical Science*—vol. xxi., p. 309.

Allusions are made in this chapter to other operators and operations, but as they are all only modifications of the methods of Roux and Warren, it is not necessary to refer to them.

Several years back, I remember having in my possession a monograph on the subject of staphyloraphy, from the pen of the late Professor Mütter. I regret that I cannot now lay my hands upon it. Dr. Mütter was much interested in the operation, and his pamphlet, as I recall, abounded in cases illustrating his success in this direction.

To Mr. Ferguson, of England, however, more than to any other man, are we perhaps indebted for a scientific appreciation of the requirements in staphyloraphy. The cutting and sewing parts of the operation are simple mechanical manipulations, which are of consequence only as they tax the ingenuity of the surgeon. The proper surgical understanding of the subject consists, as we are prepared to see, in a just acquaintance with the muscular relations of the parts. These relations we have already studied. To Mr. Ferguson belongs the credit of first making these demonstrations. It is very true that before his time incisions in the soft parts had been advised. Roux, Dieffenbach, Mettauer, Liston, and Warren, all practiced them where difficulty was met with in approximating the fissure; but the incision practiced by them, as remarked by Mr. Ferguson, seems to have been without reference to the anatomy of the parts, and as a consequence rendered success somewhat a matter of accident. The operation of Mr. Ferguson, as it pertains to the paring and bringing of the fissure together, is about the same as that practiced by Dr. Warren.

He pares the cleft before inserting his sutures, and his knots are made about as Dr. Warren's.

In looking over the history of staphyloraphy, the reader will be struck with the likeness in complaints, the three principal ones of which seem to be—the difficulty in tying the ligatures; the great tendency of these ligatures to slough out after they are once nicely secured; and the concealment of the parts during operation, both because of deficiency in light and the accumulation of the viscid muco saliva, which in such mouths is secreted in such abundance.

Now, in the direction of operations in and about the oral cavity, I have had that experience, and that practice which will, perhaps, justify me in asserting that there is an easier and more philosophical mode of doing the operation of staphyloraphy than has yet been practiced. To sit in front of a patient and operate in the mouth is most unhandy. The operator is in his own light, besides it is certainly much more difficult to operate sitting than standing; motion is cramped, freedom is interfered with. To operate on the mouth of a patient, when the surgeon is seated in front, makes necessary an assistant, whose office it is to manage the head. This has a twofold objection: firstly, the assistant cannot follow in all those little changes which are so necessary to success. He does not see quickly the shiftings and turnings, which so assist in the manipulations. Again, one is more naturally ambi-dextral when the arms are supported than when they are unsupported. In operating by sitting in front of a patient the surgeon must work at arm's length; he has nothing which shall steady him; no guard either which shall enable him to shield himself against any sudden awkward movement on the part of the assistant or patient.

To make a knot in a deep canal, as the mouth or vagina, is not easy. To fix a ligature by compressing something upon it is very simple. Silk acts as an irritant to human tissue, silver or lead does not; therefore, where it is desirable to retain a ligature for several days or weeks, without irritation, metal is best adapted.

Instruments perfectly suited to an operation simplify it much.

Predicating an operation on these self-evident truths, I commend the following as the best and easiest mode of manipulating; believing, I may assert, that where once practiced, it will take precedence of all other modes of doing the operation.

The instruments required are those belonging to the ordinary vesico-vaginal case. The long-handled knife, needles, and needle-carrier; shot-carrier and compressor, tenaculum; cutting forceps, silver or lead wire; the little perforated flat shot of McLean, and mop sticks. Better instruments than these for the operation of staphyloraphy will not, I think, ever be devised. The instruments arranged on a tray in the order that they are to be used; the patient, having the steps of the operation explained to him, for much is expected from him, is seated on a chair having a movable head-rest—it is well if this rest moves in a ball-and-socket joint; at any rate, it must be movable backward and forward. The ordinary dental chair answers the purpose admirably; when the head is placed on this rest the mouth will be found to look directly upward. The surgeon now takes his position back of the patient, standing on a foot-stool of such height that his breast shall be brought on a level with the head of the patient. If the reader is disposed, he can thus seat a friend, and taking a position back of him, by leaning over his head, he will find that when the mouth is opened he not only has a most perfect view of a perfectly lighted cavity, but by leaning against him, and passing his arms around the head so as to bring the hands to the mouth, he will recognize that, besides having his own arms so steadied as to allow of the easiest manipulation, he has the movements of the patient completely under his control.

Now this relative position of the surgeon to his patient gives him not only the advantages enumerated, but he is out of the way of all expectorative efforts. If saliva and blood should accumulate about the parts at which he is working, he can and will, almost unconsciously, and certainly without effort, so turn the head that, while he does not at all interfere with his own manipulations, he throws the fluid into some more convenient part of the mouth. This, I know, can be done so handily that each step of the operation may be accomplished without the annoyance and delay experienced in using the mop. Certainly a patient so held cannot make any movement too quick or too unexpected for the surgeon. True, he might be so obstreperous that the operation could not be accomplished, but he could not make any movement which the knife of the operator could not naturally follow, and, therefore, any accidental harm could not be done.

Patient and surgeon thus in position, the

tenaculum is taken up and carried through the very point of the cleft pendulum. The part is then put on stretch, and a paring of about a line taken from the whole of that side, cutting from behind forward. The manipulation is repeated on the opposite side. The first stage completed, tinct. of iodine, diluted to about one-tenth its officinal strength, with wine or water, is given the patient, with which to gargle and wash the mouth. This I find to cleanse the mouth admirably; besides, it is a fine healthy stimulant.

The bleeding arrested and the patient a little recovered, the second step of passing the ligature may be attempted. Take up one of the curved needles, and, threading it with the silver wire, fix it in the needle-carrier. Passing now the instrument into the mouth, thrust the needle through one side of the cleft, about three lines from the margin and about half an inch from the apex of the cleft or hard palate. After passing it to the point at which it is held by the carrier, it is to be caught by the forceps and brought through, the slide of the porte being loosened so as to permit of such withdrawal of the needle from its beaks. This accomplished, the needle is to be replaced in the porte and carried through the opposite side; relieving it from the grasp of the carrier as before, the two ends are brought from the mouth and their relation secured by one or two twists. This completes the first ligature. A second is now passed half an inch farther on, also a third or more, as may seem needed. The manipulations required are of course the same as for the first. This completes the second stage, and the patient is allowed to rest as before. If he needs to wash his mouth, the surgeon must be careful and look after his ligatures.

The third stage, or approximation of the edges is next to be accomplished. Take up the shot-carrier, and, slipping through its fenestra the twisted ends of the first ligature introduced, push the carrier down the wires, and you will find, as it approaches the palate, the edges of the cleft approximate. This I think will always be found to be the case with the ligature nearest the hard palate: the parts come together very easily. You now slip off the carrier and take up one of the perforated shot; put this on the wires, and with the carrier force it down to the palate. Holding it now in place, which is done simply by laying the wires against the carrier and shifting your finger over it, take up with the right hand the forceps, and compress the shot tightly upon the wires. The parts up to this ligature will now be found nicely approximated and fixed. This completed, repeat the operation on the second ligature. But this will be found, perhaps, impossible, without greatly overstraining the parts and risking the tearing out of the wire.

If this is the case, you at once desist from the attempt, and make the section as described of the tensor palati muscles on either side. Now most likely the parts will come together comfortably; if so, fix them with the shot as before; if, however, an approximation has not yet been secured, nick the anterior half arch, and still, if this does not suffice, cut the posterior and the levator palati; the ligature may then be fixed, as well as those still farther back. Each shot firmly compressed, the wires are to be cut off as closely as possible. Thus the third and fourth steps of the operation are completed, and nothing remains but to enjoin on the patient the most perfect rest. Here lies half the secret of success; the patient should scarcely move for two or three days, certainly he should not be permitted any food that would demand for its comminution the slightest effort of mastication. He should be directed to let the liquids he might take be allowed to trickle down his throat, rather than that he should attempt to swallow them. These restrictions need not, however, be made quite so strict, if in the operation myotomy of the half arches has been performed.

In the old mode of doing the operation, it was found necessary after the first one or two days to remove the ligatures because of their tendency to slough out; the use of silver wire obviates this necessity, as the metal seems to provoke no inflammation. These ligatures may therefore, if they seem useful, be allowed to remain from one to three weeks. This non-irritating quality of the metal ligature is so marked that I have seen them, when applied on varicose veins, as firmly fixed after four months as the first day they were put on. This is the feature which adapts them so admirably for staphyloraphy.

The wounds made in dividing the muscles may be left to nature. If the patient is in condition for the principal operations, he is in that condition which does away with any necessity for care in trifling flesh wounds; if, however, any trouble should arise in such a direction, the practice would be that which would apply to similar wounds, however made.

It is seen that the manipulations here suggested for the cure of cleft palate are precisely the same

as those practiced in vesico-vaginal fistula, and that the instruments adapted to the one are exactly suited for the other.

The position in operating is, I think, a new suggestion, and is founded on, I may say, a rather extended experience in manipulating upon and about the mouth. To me it seems the most proper position for doing easily and comfortably the operation; any advantages it may possess over the old mode of sitting down in front of the patient are so easily studied upon the person of any one, that I trust the suggestion will receive the attention I think it merits.

With this consideration of cleft palate proper, we may pass to the study of other defects of the parts.

Holes in the Palate.—Breaks in the continuity of the palate may be treated in two ways: either by an operation strictly surgical, as reference may be had to the use of the knife, or by means which might be denominated surgico-mechanical. If the knife is to be exclusively used, we have simply to pare the edges of the break, and then get the parts in apposition as best we can. Herein consists the difficulty of such operations, and the tact and knowledge of the surgeon will prove his best guides. If the breaks are in the soft palate, any resistance that may be met with is to be overcome precisely as we would overcome it in staphyloraphy—let the surgeon consider what muscle or muscles oppose him, and divide them as before suggested; or, if myotomy seems scarcely necessary, he cannot unlikely accomplish his purpose by making lateral slits through the mucous membrane alone, or otherwise he may go still a little deeper, making a kind of semi-myotomy operation.

If the break is small, one ligature will perhaps be all that is necessary to secure the approximation of the pared edges, and this suture is to be made and fixed precisely as in the previous operation. If more than one suture seems indicated, why, of course, two, three, or more are to be employed.

Defects in the hard palate are also amenable to surgical skill; they may be remedied by the use of the knife and stimulating local applications, or if these fail, an artificial palate, properly constructed, will so admirably supply the deficiency that the patient is rendered quite as well off as his fellows.

Using the knife alone, most successful results are frequently attained by first paring the edges of the break, and afterward dissecting the parts freely from the bone. This mode of operating is admirably suited to such hard palates as have a thick, soft, mucous membrane. By such a mode of operating, and with such a mucous membrane, quite wide chasms may be easily spanned.

With mucous membrane of this character, plastic operations will be found to answer very well. It is quite easy to get a flap without disturbing the periosteum, and such a flap may be twisted on its pedicle without any special interference with its function. The pedicle, however, should be as wide as possible, remembering that the circulation pertains to the basement membrane alone. An objection, however, to such operations in the mouth, is the difficulty that attends the fixing of the flap in its new place.

The next mode of relieving these defects that may be alluded to, is that originally suggested by Dieffenbach. This surgeon commends the penciling of the edges of the break with tincture of cantharides, hoping thereby to excite granulation to an extent that shall fill up the cleft.

Now, while this mode, as practiced by Dieffenbach, does very well for small holes, it seldom succeeds with the larger. The granulations, having nothing to support them, break down before connecting in the middle.

This defect in the treatment can be remedied, and success almost warranted, by the following modification: Make a simple obturator or artificial palate; the mode of doing which is described a page farther on. After fitting this so as to fit accurately every portion of the hard palate, it may be removed, and the cleft pared; next, touch the parts with cantharides or tincture of iodine—the latter I prefer. The plate is now to be replaced, and will be found to act most completely as a support to the granulations which will be formed. The process of freshening the edges is, of course, to be frequently repeated; but after the first paring, the cuts may be made from the circle on and not around the cavity.

The next class of palatine defects which may claim our attention are such as require for their relief a surgico-mechanical treatment. This brings us to the subject of the Obturator; an instrument whose style, form and manufacture is of the same interest to the surgeon as is the Pessary to the obstetrician.

To be continued.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

BY GEO. K. SMITH, M.D.,

Demonstrator of Anatomy in the Long Island College Hospital Brooklyn, New York.

Continued from page 275.

Figs. 8 and 9 represent the posterior surfaces of specimens 7 and 8, which were taken from the same subject, and are identical in the insertion of their capsular ligaments.

Fig. 8.

Fig. 9.

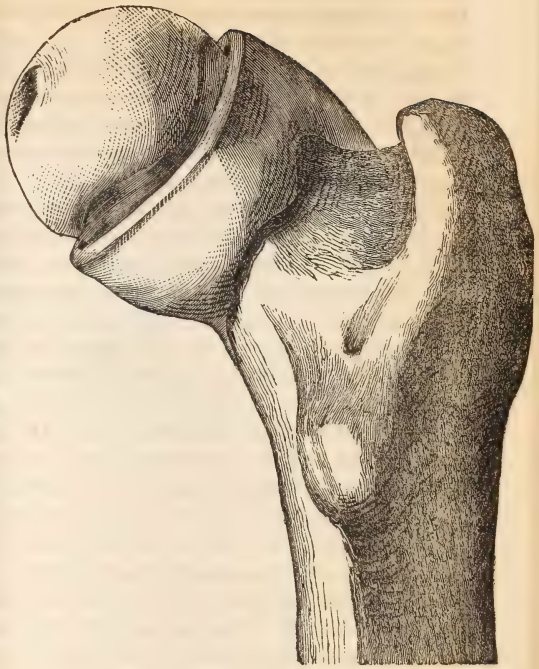


Fig. 10.

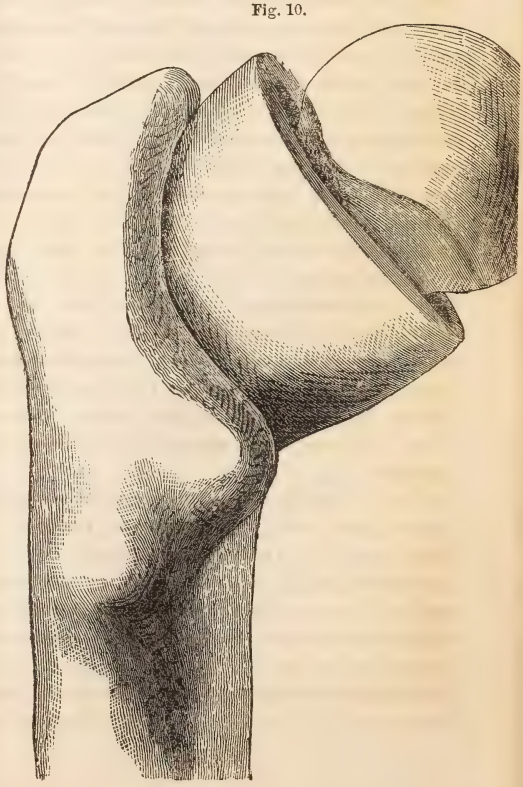


Fig. 10 exhibits the capsular ligament with its insertion into the shaft of the bone, and illustrates the insertion of the morbid capsule in all those cases in which fracture has been followed by absorption of the entire neck. The specimen was prepared by dissection of the normal capsule in a manner to be described hereafter.

From the foregoing table and its illustrative engravings, it will be seen: 1st. That scarce any two specimens of the normal capsule, taken from different subjects, are alike in their insertion into the neck of the bone; consequently no definite

description of its insertion can be given. 2d. That the normal capsules of the opposite femurs of the same subject are alike in their insertion. Having measured twenty-four pairs, I have yet to see a single variation from this rule. Moreover, it is just what we must expect to find, in obedience to that law of symmetrical conformation which pervades the animal economy.

These facts are of great importance in the settlement of the question of bony union within the capsule; for, since the injured bone and its capsule often furnish little or no evidence of the exact location of the fracture, on account of the changes they have undergone since the injury, we are obliged to look elsewhere for facts to determine whether the given specimen be an example of fracture entirely within the normal capsule. This cannot be determined by comparing the specimen with the normal capsule taken from a different subject, since no two capsules taken from different subjects are alike; but may be ascertained by comparing it with the normal capsule of the opposite femur of the same subject, whose insertion into the neck of the bone is exactly the same as the insertion of the capsule into the neck of the injured bone previous to the fracture.

Before entering upon a review of the specimens presented as proofs of bony union of intra-capsular fracture, I propose to consider briefly some of the pathological changes which follow the injury, and particularly the effect of these changes in removing the insertion of the normal capsule; since some surgeons who have written on this subject have regarded the insertion of the capsule of the morbid specimen as being identical with the insertion of the normal capsule, and have considered as examples of union of intra-capsular fracture all specimens in which the line of union was included by the morbid capsule. Thus, Professor March has questioned the authority of Wilson's Anatomy in locating the attachment of the capsule at the middle of the posterior surface of the neck, and cites, as proof to the contrary, the appearance of the dried capsule attached to one of his specimens representing union after fracture of the neck. The engraving of this specimen represents the capsule as being inserted into the neck of the bone just within the posterior inter-trochanteric line, and corresponds with his description of the capsule and its insertion, which I have already quoted. The same opinion is also noticed in an inaugural thesis on "Intra-capsular Fractures of the Cervix Femoris," by John George Johnson, *New York Journal of Medicine*, 3d series, vol. ii. p. 321:—

"There is a single point more worthy of notice; it is the extreme difficulty there appears to be in all these specimens, of deciding whether they are intra-capsular, or only partly within. The mere fact that a surgeon of such eminence as Professor Mussey should have been misled and should have been so deceived as to take a specimen across the Atlantic, to convince Sir Astley Cooper of the possibility of ossific union of intra-capsular fractures, by whom it was conclusively shown that he was in error, is sufficient to prove the difficulty of deciding on these specimens. All such specimens should be preserved in the wet state, with the capsule still attached, when there could be no doubt of their character."

That this conclusion concerning the identity of the insertion of the morbid capsule with that of the normal capsule is incorrect, will be seen from the following observations: First, the *normal capsule* usually has its posterior insertion into the *middle of the neck* of the bone, and NEVER as far remote as the shaft. Second, the morbid capsule, after fracture of the neck, often has its insertion into the shaft of the bone.

Two instances of this attachment of the morbid capsule are reported by Dr. John C. Warren, of Boston. He states that in the first—

"The principal object of attention was the hip. On cutting into this articulation, the head of the os femoris was found to be fixed in its socket, being anchylosed throughout with the os innominatum. The neck of the bone had disappeared. The shaft had been drawn up an inch and a half higher than the head, and on the surface corresponding with the anchylosed head a regular, smooth, articulating surface was formed, which was mostly surrounded by an adventitious capsule, shorter and more closely embracing the bone than the normal capsule."

In the second:—

"The muscles about the thigh were thin and wasted, the capsular ligament was thickened, but regular on the outside. On cutting into the articulation, there was no appearance of recent inflammation; the neck of the thigh-bone was absorbed."*

The engraving of this specimen shows the neck entirely absorbed, the capsular ligament inserted into the shaft of the bone, and the head of the bone united to the shaft. This Dr. Warren calls "An instance of fracture quite within the capsular ligament, close upon the head of the bone."*

* Cooper on Dislocations and Fractures, Amer. edit., p. 199.

Robert W. Smith, of Dublin, has reported a number of cases of fracture of the neck which illustrate this insertion of the morbid capsule:—

"Case XXV. Robert Donovan, aged eighty, fracture of the neck of the femur within the capsule. The surface of the superior fragment was concave, smooth, and polished; the neck of the bone absorbed, and the cartilage of the head atrophied, and in some places totally removed; the capsule was unusually thickened, and organized lymph adhered to its internal surface."*

The capsule is shown in the engraving to be inserted into the shaft of the bone.

Malgaigne records an instance in which the morbid capsule extended "from the edge of the cotyloid cavity to below the lesser trochanter."†

This insertion of the capsule is fully explained by the resulting changes which follow fracture of the neck; and it will be seen that the insertion of the morbid capsule into the shaft of the bone must follow, as a consequence, the entire absorption of the neck, and that the periosteum covering the posterior surface of the neck external to the insertion of the normal capsule becomes, after absorption of the neck, a part of the morbid capsule which has its insertion into the shaft of the bone.

Robert W. Smith states that—

"In recent cases of intra-capsular fractures of the neck of the femur there are but few phenomena worthy of notice revealed by the anatomical examination of the joint.

* * * "There is generally observed a preternatural amount of vascularity of the synovial membrane, and in some cases a small quantity of blood is found within the capsule, and sometimes coagulable lymph is seen adherent to the internal surface of the capsular ligament. * *

"The capsular ligament is usually greatly increased in thickness, and occasionally osseous matter is deposited in its structure.

* * * "In general, the head of the femur preserves its globular form, and is movable in its socket; but sometimes it becomes adherent to the acetabulum.

"The superior fragment of the broken cervix disappears to the level of the brim of the acetabulum, either in consequence of the action of the absorbent vessels, or by the friction of the broken surfaces, or perhaps it is due to a combination of both these causes. The absorption, however, sometimes extends much further; I have seen half of the globular head of the bone thus removed, and a case has been recorded in which the head of the bone was completely absorbed. In old cases the femoral fragment is likewise absorbed to a greater or less extent; sometimes it disappears entirely to its base, and the portion of the shaft from which in the normal state it springs, presents a smooth and even surface, limited by the trochanters and their connecting lines."*

When fracture occurs entirely within the capsule and is followed by absorption of the neck, the process of absorption soon reaches that point on the posterior surface of the neck to which the capsule is attached. At this point the capsule is not only inserted into the bone, but also blended with the periosteum which covers the neck external to this point. If the progress of absorption continue, that portion of the neck to which the capsule is attached is soon removed, and the capsule is left, having no other insertion than its connection with the periosteum.

If the whole of the neck be removed in this manner, the periosteum covering it is loosened, thickened by fibrous deposit, and constitutes, by its connection with the normal capsule, a part of the morbid capsule which now has its insertion into the shaft of the bone. If now the fragments be approximated and union occur, we shall have extra-capsular union of intra-capsular fracture, and yet the line of union will be included within the morbid capsule.

It is highly probable that intra-capsular fracture is sometimes followed by union without the capsule, in this manner; but this, if it ever does occur, can never be proven, since the diagnosis of intra-capsular fracture cannot be made with positive certainty during the life of the patient; and it is impossible, after absorption of the neck, to tell at what point the neck was broken. I have succeeded, by dissection of the normal capsule, in illustrating the insertion of the morbid capsule into the shaft of the bone, as seen after removal of the entire neck by absorption. (See Fig. 10.) In the dissection I commenced just within the normal capsule, and, cutting through that portion of the capsule which is reflected upward on the neck of the bone, dissected the capsule loose from its insertion into the neck, leaving it attached to the periosteum covering the neck external to this point. Continuing my dissection outward to the shaft of the bone, I raised the periosteum, which by its connection with the normal capsule exhibits a lengthened capsule inserted into the shaft of the bone.

Numerous specimens have been exhibited, both

* Smith on Fractures, p. 82. See also Case V. p. 59.

† Description of Plate No. XII., Malgaigne on Fractures, Fig. 67.

* Smith on Fractures, p. 41.

in this country and in Europe, as illustrations of bony union of intra-capsular fracture, yet but few if any of these furnish positive evidence that this desirable result has ever been obtained. Of the specimens found in European museums, Robert W. Smith recognizes seven, while Malgaigne admits but three, and Sir Astley Cooper only one. The number of specimens in this country, for which this honor is claimed, is quite equal to the number recognized by Robert William Smith. Of these, Reuben D. Mussey, Professor of Surgery in the Miami Medical College at Cincinnati, Ohio, has three; Alden March, Professor of Surgery in the Albany Medical College, has two; Willard Parker, Professor of Surgery in the College of Physicians and Surgeons in the City of New York, has one; Daniel Holmes, M.D., of Canton, Bradford County, Pa., has one. Others will be mentioned hereafter.

A review of the cases of fracture of the neck, reported by Robert W. Smith, will show us that this eminent writer has claimed, as illustrations of intra-capsular fracture, a large number of specimens in which the entire neck of the bone has been removed by absorption; therefore, we have a right, in discussing the subject of bony union, to regard with some skepticism his cases in which the exact location of the fracture is left dependent on an expressed opinion, and has not been given in the description of the specimen.

In cases x., xi., xviii., xx., xxiii., and xxv., Mr. Smith states that "the fracture was within the capsule," and that "the entire neck of the bone has been removed by absorption." We ask how it is possible for him to tell the point at which the neck was fractured, after the neck has been removed by absorption? We do not feel under obligation to believe the expressed opinion of any surgeon until we know the facts on which that opinion is founded. The first case adduced by Mr. Smith in proof of osseous union within the capsule, is that originally reported by Mr. Langstaff.* The history of this case is quite unsatisfactory, inasmuch as Mr. Langstaff tells us that the bone was fractured, without giving us a single symptom which led him to such a conclusion. The following is the history:—

"In this case the patient was a female aged fifty, when the fracture happened. She was confined to bed for nearly twelve months after the occurrence of the accident, and during the remainder of her life, a period of ten years, walked with crutches. On dissection it was found that the principal part of the neck of the bone was absorbed; the head and remaining portion of the neck were united principally by bone, and partly by a cartilaginous substance. On making a section of the bone, it was evident that there had been a fracture of the neck within the capsular ligament, and that union had taken place by osseous and cartilaginous media. With a view of ascertaining whether there was real osseous union, the bone was boiled many hours, which, by destroying all the animal matter, satisfactorily proved the extent and firmness of the osseous connection, and exhibited the spaces which had been occupied by cartilaginous matter."*

Mr. Langstaff states that "on dissection it was found that the principal part of the neck of the bone was absorbed." From this we conclude that more than half of the neck was removed, and, if so, it is more than probable that the line of union was, at least, partly without the normal capsule, since the measurements of sixty-one specimens of the normal capsule show that its insertion into the posterior surface of the neck is in many instances nearer to the head of the bone than it is to the posterior inter-trochanteric line. The line of union, in this specimen, is undoubtedly external to the normal capsule; yet we cannot say, from this, that the fracture was also without, neither that it was within the capsule, since the fragments of the neck suffered loss by absorption before union occurred, and it is consequently impossible to give the exact location of the fracture. He also states that "on making a section of the bone it was evident that there had been a fracture of the neck within the capsular ligament." This opinion was undoubtedly founded on the appearance of the morbid specimen, while its capsule still remained attached to the bone; and, if so, cannot be considered conclusive, for the exact location of the insertion of the normal capsule must be determined before we can state that the fracture was intra-capsular. We have already shown that the insertion of the morbid capsule, after a portion of the neck has been removed by absorption, is not identical with the insertion of the normal capsule; hence, even though the section of the bone shows that the line of union is included within the morbid capsule, which still remains attached to the bone, it furnishes no evidence that the line of fracture was entirely within the normal capsule.

* Medico-Chirurgical Transactions, vol. xiii. p. 491.

* Smith on Fractures, p. 57.

If, on the contrary, the opinion that the fracture was intra-capsular were founded on the authority of any anatomist who has definitely located the insertion of the capsular ligament, it is still liable to error, since the line of capsular attachment to the neck of the bone is so variable in specimens taken from different subjects that no definite location can be assigned to it.

On referring to Mr. Langstaff's history of this case, I find that he has also reported in the same paper six other cases, as illustrations of intra-capsular fracture, one of which he states, was—

"A transverse fracture of the neck of the os femoris, within the capsule, closely united by ligament. The neck of the bone had been absorbed nearly in a line with its origin from the trochanter."

In four of these cases the neck was "nearly absorbed," and in another he states that the neck was "completely absorbed." In the last case the line of fracture may have been either close to the head or close to the shaft of the bone, or at any point intermediate, and neither Mr. Langstaff nor any other surgeon could assign a definite location to the line of fracture after the removal of the entire neck by absorption. In most of these cases he describes the capsular ligament as being thickened by fibrous deposit, but does not speak of its having an abnormal insertion. After loss of the entire neck by absorption, the capsule is found to have its insertion into the *shaft of the bone*, and there can be but little doubt that Mr. Langstaff regarded *this* as its *normal insertion*. If so, fracture at any point between the head and the shaft of the bone would, in his opinion, be intra-capsular. We do not doubt the *honesty* of Mr. Langstaff's report, but we must be allowed to question the truth of his opinions, when we find that in six of the seven cases of "intra-capsular fracture" reported by him, the neck of the bone had lost so much of its length by absorption that it was impossible to know whether the fracture had been *entirely within* or partly without the capsule.

No. II. *Dr. Brulatour's Case* is as follows :—

"Dr. James, an English physician, (residing at Bordeaux,) aged forty-seven, was thrown from his horse on the 29th of March, 1826; he fell directly upon the great trochanter, but got up and walked a step or two, which occasioned such acute pain in the hip-joint that he instantly fell again. On examination, immediately after the accident, Dr. Brulatour observed the principal signs of fracture of the neck of the femur, such as shortening of the affected limb, eversion of the foot, and a feeling of crepitation in the joint when counter-extension was made. Extension of the limb was kept up for two months, so as to preserve it of its natural length. Three months after the receipt of the injury, Dr. James was able to walk with only the assistance of a cane, and subsequently recovered the full use of the limb.

"On the twentieth of December, nine months after the accident, he was attacked with hæmatemesis, which proved fatal in two days. The post-mortem examination of the right hip showed the capsule a little thickened, the cotyloid cavity and inter-articular ligament in a natural state; the neck of the femur shortened, an irregular line surrounding the neck, denoting the direction of the fracture, and considerable bony deposit at the bottom of the head of the femur, and at the external and posterior part. A section of the head of the femur was made in a line drawn from its center to the bottom of the great trochanter so as perfectly to expose the callus. The line of union indicated by the callus was smooth, and polished as ivory. The line of callus denoted also that the bottom of the head of the femur had been broken at its superior and posterior part."

Definite measurements of this specimen are not given in the description of the post-mortem appearances in Mr. Smith's work; consequently we have no means of knowing the exact location of the line of union. The history states that the neck was shortened, but does not tell us how much. In most cases of union, after fracture of the neck, it is shown that union did not occur till after the posterior surface of the neck had been nearly or quite removed by absorption. All of Prof. Mussey's cases of union are examples of this kind. Prof. Parker's has suffered the same loss. Mr. Adams's case is another illustration of this change.*

If a great portion of the posterior surface of the neck be removed before union takes place, the line of union will be found without the normal capsule, and in these cases it is impossible to tell at what point the fracture occurred. In Dr. Brulatour's history of the case, the following definite measurements of the specimen are given, which Mr. Smith did not quote :—

The post-mortem examination showed the neck of the femur shortened; "from the bottom of the head to the top of the great trochanter was only four lines, and from the same point to the top of the small trochanter, six lines."† The line of union was at some point between the head and

* See Smith on Fractures, page 59.
† Med.-Chirurg. Trans., vol. xiii.

the trochanters, and was therefore less than four lines distant from the top of the trochanter-major, and less than six lines from the top of the trochanter-minor, and could not have been included by the normal capsule.

"No. III. *Mr. Stanley's Case.*—A young man, aged eighteen, fell from the top of a loaded cart upon his right hip, the injury of which was attended with the following symptoms: He was wholly unable to move the limb; the thigh was bent to a right angle with the pelvis, and could not be extended; abduction was difficult; the limb was everted, but there was no shortening, nor could crepitus be felt in any motion of the limb. This patient died, of what was supposed to be small-pox, about three months after the occurrence of the accident. In the examination of the joint, after death, the capsule was found thickened, the round ligament uninjured; a line of fracture extended obliquely through the neck of the femur, and entirely within the capsule; the neck of the bone was shortened, and its head approximated to the trochanter-major. The fractured surfaces were in the closest apposition, and firmly united nearly in their whole extent by bone. There was an irregular deposition of bone upon the neck of the femur, beneath its synovial and periosteal covering, along the line of the fracture."*

The history of this case, as given by Mr. Smith on page 58 of his work on Fractures, affords but little evidence that the bone was ever fractured; and had Mr. Smith quoted *the whole* of Mr. Stanley's report of the case, it would have convinced most surgeons that there was at least a reasonable doubt that fracture had ever occurred. We can see no good reason why a portion of the history, as important as the following, should be suppressed:—

"The age of the patient was unfavorable to the occurrence of a fracture of the neck of the thigh-bone. The general opinion, therefore, of the several surgeons to whose judgment the case was submitted, favoring the belief of a dislocation into the foramen ovale, forcible extension of the limb was made by means of the pulleys, and the thigh then moved in several directions, by which the head of the bone might be replaced in its socket."†

The symptoms which attended the injury seem to be in harmony with the diagnosis of dislocation, for the patient was "wholly unable to move the limb; the thigh was bent to a right angle with the pelvis, and could not be extended; abduction was difficult; the limb was everted, but there was no shortening, nor could *crepitus* be felt in any motion of the limb." If the neck of the bone had been broken by the fall, it seems impossible that forcible extension of the limb by the pulleys, together with the moving of the limb in different directions, should have failed to enable Mr. Stanley to detect crepitus. If there had been impacted fracture of the neck, the extending force applied would have loosened the impaction of the fragments, and then, according to Mr. Smith's rule, we could not have hoped "for the occurrence of bony consolidation."* Malgaigne affirms, of this specimen, that the neck has lost nothing of its form or length by absorption; while Mr. Smith states that the neck was shortened and its head approximated to the trochanter-major. It is impossible to reconcile these conflicting statements. If the neck was not shortened, it is probable that the insertion of the capsule was not removed. If, on the contrary, "the neck was shortened, and its head approximated to the trochanter-major," it is quite probable that the insertion of the capsule had receded toward the shaft of the bone, and that the line of union was at least partly without the normal capsule. Mr. Stanley's history of the case states that "the neck was shortened, and its head in consequence approximated to the trochanter-major."

"No. IV. *Mr. Swan's Case.*—Mrs. Powel, above eighty years of age, fell down, Nov. 14th, 1824. Sir Astley Cooper, who saw her soon after, believed that there was a fracture of the neck of the femur, although there was no appreciable shortening of the limb, and only a slight inclination of the toes outward; crepitus could not be perceived. The patient died about five weeks after the occurrence of the accident. Upon examination of the joint, after death, the fracture was found to have been entirely within the capsular ligament, and the greater part of it was firmly united. A section was made through the fractured part, and a faint white line was perceived in one portion of the union, but the rest appeared to be entirely bone. The cervical ligament had not been injured."†

Sir Astley's opinion that the bone was fractured, does not seem to be well founded on the recorded symptoms of the case. The only symptom which can be said to lead to such a conclusion is "a slight inclination of the toes outward;" and this is what we have reason to expect in every severe contusion of the muscles of the hip, as an effort on the part of the patient to relieve pain by relaxing these muscles, all of which rotate the limb outward. Sir Astley states:—

* Smith on Fractures, page 58.
† Medico-Chirurgical Transactions, vol. xviii. p. 257.

* See page 64, Smith on Fractures.
† Smith on Fractures, page 59.

"I saw her soon after, and found her complaining very much of pain in the left hip; the limb could be moved in every direction, but this motion produced excessive pain. She was laid on her back, with the limb extended, and nothing *was ever done* beyond the application of fomentations for the first few days. I believed there was a fracture of the neck of the thigh-bone, although *the limb remained quite as long as the other; and I could neither perceive a crepitus*, nor any altered *appearance in its position*, except a slight inclination of the toes outward. She had no appetite for common food, and for three weeks appeared so weak that she was under the necessity of taking wine and brandy."*

The patient "was above eighty years of age" when she received the injury, and the vital powers were so nearly exhausted that her death occurred five weeks afterward. After the injury, "she had no appetite for common food, and for three weeks appeared so weak that she was under the necessity of taking wine and brandy." It is difficult to conceive it possible that, under such unfavorable circumstances, bony union of an intra-capsular fracture should occur in so short a time *without any treatment*, when more than that time is required for bony union of a fracture of the shaft of the femur in a patient enjoying full health in the prime of life. If we admit that the neck was fractured, and that it was subsequently united, then we wish to know if the specimen has been submitted to the test of maceration or boiling to prove the statement of Mr. Swan, that "the greater part of the fracture was firmly united by bone"? If not, there exists a possibility that the bond of union may be composed of fibrous tissue instead of bone.

"No. V. *Mr. Adams's Case.*—Owen Curran, aged seventy, was, for the last five years, an inmate of the pauper department of the House of Industry. * * On the first of August, 1837, while walking across his ward, he fell on his right side; he was unable to rise, and felt pain in his right hip. * * He was visited by Mr. William Johnstone, who found the limb everted, and only half an inch shorter than the other. * * Mr. Johnstone considered the case a fracture of the cervix femoris, which required no other surgical treatment than that of placing and preserving the limb in a semiflexed position over pillows."

"This man survived the accident one year and nearly ten months, and was able to walk." At the expiration of this time, he had an attack of bronchitis, which terminated fatally in four days. An examination of the body showed that the right leg and thigh were very much everted; the trochanter-major was elevated and projected much outward; the degree of shortening just amounted to one inch; the muscles presented a healthy appearance; the capsular ligament was of a yellowish color, and somewhat thickened. * * * The round ligament was sound. The head and neck of the bone had lost their normal obliquity, and were directed nearly horizontally inward; the cervix presented, both anteriorly and posteriorly, evidence of a transverse intra-capsular fracture having occurred; the globular-shaped head of the femur was closely approximated behind and below to the posterior intra-trochanteric line, and to the lesser trochanter; so that the neck seemed altogether lost, except anteriorly, where a very well-marked ridge of bone showed the seat of the displacement and of the union of the fragments. * * * The fracture of the neck, posteriorly, was found to have been closer to the corona of the head than anteriorly. * * * Scarcely any portion of the neck can be said to have been left.

"The bone was, in its recent state, on the 25th of May, 1839, laid before a meeting of the Pathological Society. It seemed to be the universal opinion of the members present, that it was a decided specimen of the intra-capsular fracture of the cervix femoris which had been solidly united by bony callus."* Accurate engravings of this specimen may be seen on page 61 of Mr. Smith's work.

It is difficult to see how it is possible that "the cervix presented, both anteriorly and posteriorly, evidence of a transverse intra-capsular fracture," when "scarcely any portion of the neck can be said to have been left." In the normal condition of these parts, full half of the posterior surface of the neck is usually found to be external to the capsule; and since "the neck seems altogether lost, except anteriorly," it is plainly a case in which union occurred at least partly without the normal capsule, even though the line of union was included by the capsule of the morbid specimen, as seen by the members of the Pathological Society. We have already shown that it is impossible to locate the fracture after the neck has been removed by absorption. The fact that the line of union was included by the morbid capsule, furnishes no evidence that the fracture was intra-capsular.

To be continued.

* Cooper on Dislocations and Fractures of the Joints. London edition, page 157.

* Smith on Fractures, page 60. The history of this case being very lengthy, has not been quoted in full, yet it is believed that no important fact has been omitted.

Illustrations of Hospital Practice.

PHILADELPHIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. Da Costa.

January 15, 1862.

ANÆMIA—BLOOD DISEASE—ENLARGEMENT OF THE SPLEEN.

The patient, a woman aged thirty-six, was before the class at the last clinic. She had lost her health from a long-continued residence in a miasmatic district. Both liver and spleen were found markedly enlarged. There was great sensitiveness of the skin, dyspnœa, palpitation of the heart, œdema of the feet. The significance of these symptoms was at the time fully explained. In resuming the case, Dr. Da Costa called special attention to the peculiar waxy hue of the countenance, and other signs indicative of the altered condition of the blood. The color of the face may at first sight be mistaken for that of jaundice. Extreme cases of anæmia indeed simulate in appearance certain cases of jaundice. But the look of the eye is always very different. In jaundice the membranes are invariably yellow; in anæmia, unchanged or of pearly whiteness.

You may also, to some extent, distinguish an impoverished state of the blood by the stethoscope. If you apply that instrument over the jugular vein you will hear a humming sound, *bruit de diable*. This continuous murmur is very frequently present in anæmia. The character of the blood, too, when drawn, is different from that of health. Thus when we examined the blood of this patient, taken from a small puncture, we found blood and water literally flowing out together, or, in other words, the serum and fibrin separating as they flowed from the wound, and a loose clot rapidly forming. Whenever we see this rapid separation of the constituents of the blood taking place, and a loose, small clot forming, we may regard it as diagnostic of anæmia. Upon examination of the blood with the microscope, we found the red corpuscles few in number, jagged, and the white corpuscles increased in quantity. In healthy blood the former are as 300 to 1 of the latter; in this case, the proportion, judging roughly, is about 60 to 1. So large an increase of white corpuscles is not usually found in pure anæmia, but is more characteristic of that disease termed, of late years, leucocythemia. This strange affection is invariably connected with degeneration of the blood-making glands, the spleen, mesenteric glands, etc. The diseased spleen is perhaps the grave of the red globules of the blood. It consumes them as they pass through it, giving out the white in their stead. A disease of that organ, at all events, permits the changes which are necessary to produce the latter constituent of the blood in excess.

Prognosis.—When the blood is profoundly altered the disease assumes a serious character, and is more likely to prove fatal when the excess of white globules is great. There is no medicine yet discovered which has certain power to change this condition of the vital fluid. The debility goes on and death is the result, from diarrhœa or hemorrhage. This case, however, is not hopeless. The excess of white globules is slight, and the disease may yield to appropriate treatment. What should that treatment be? She should have the most nutritious food—beef-tea and those articles which contain a large amount of albumen. She should take also the cod-liver oil in such quantities as her stomach will tolerate. The object should be to increase the red corpuscles of the blood. Regarding it as a case which has had a malarial origin, I would give her twice a day a pill composed of two grains of quinine and two grains of metallic iron; the latter, like the cod-liver oil, is regarded as an agent increasing the red globules. But we have here also extreme sensitiveness. How can we relieve it? Perhaps by anointing the surface with an oleaginous substance, as sweet oil. Why? On the ground of analogy. In scarlatina the application of oil to the surface relieves the itching and extreme sensitiveness, and imparts a soothing sensation. We will at least try the remedy in this case.

APOPLEXY—DEATH—CLOT IN THE VENTRICLE.

This was the case of a female twenty years of age, admitted, far advanced in pregnancy, into the obstetric wards six weeks ago. Was taken in labor on Monday of last week; pains vague and irregular, continued on Tuesday; on Wednesday she fainted, the head being then in the pelvis. Symptoms of congestion of the brain making their appearance, she was bled. Delivery was effected by the forceps, she being under the influence of ether. She appeared well after delivery, but soon convulsions followed, continuing six hours, but readily controlled by chloroform. Her breathing, however, became labored, and she sank into a semi-conscious state. No paralysis; laborious respiration continued till Thursday at 4 P.M., when she died.

The lecturer did not propose to direct attention to any obstetrical phenomena in this case, but rather to two striking points which it exhibits in a medical point of view. You have before you the brain of this patient, and you observe a large clot occupying the right lateral ventricle, extending to the third through the foramen of Monro, through the iter ad quartum ventriculum to the fourth, and finding its way, therefore, from above downward to the base of the brain. Notwithstanding this extensive clot, there was an entire absence of paralysis—and why? Because the clot did not press materially upon the substance of the brain. I have myself seen a case in which a clot was found distending the lateral ventricle, and in all the ventricles of the brain, in which there was no paralysis. So that we may have slight compression of the brain substance from a large effusion, without paralysis following; this

sign depending indeed more upon the situation of the clot and upon the amount of pressure resulting from it than upon its size. Why laborious breathing? Simply because the clot pressed upon the origin of the pneumogastric nerve.

JAUNDICE—ENLARGEMENT OF THE LIVER.

This patient was admitted to the hospital last evening in a state of nervous depression from intoxication, though she denies being habitually an intemperate woman. She is twenty-five years old, married; states to have been sick for nearly two weeks. She does not remember a chill at the commencement of sickness, but speaks of a gathering in her stomach, a lump in the region of her liver, which she has noticed since her illness; no thirst; slight, if any, fever; costive; urine scanty; appetite good; thinks she caught cold in ironing in a damp house and sleeping in a damp apartment; pulse feeble, 86 in a minute; respiration 25; has no itching of skin; some cough; lungs, on percussion, are clear, both anteriorly and posteriorly; auscultation reveals extensive dry râles and a few fine, moist sounds; heart impulse feeble, no blowing sounds; slight tenderness at lower portion of abdomen; considerable in epigastrium and right hypochondrium; on percussion we find the whole liver enlarged, especially the left lobe; some nausea, no vomiting, but there is not any inflammation of the stomach, as we judge from the clean tongue. The epigastric tenderness really proceeds from the liver.

Our diagnosis, then, is jaundice, with bronchitis and slight irritation of the stomach, the latter probably the sequence of a debauch. The jaundice is evidently connected with marked hepatic enlargement. The stools will no doubt be found clay-colored and devoid of bile. When we have bile in the circulation, it is at the expense of bile in the feces. Now we note two curious facts in this case, to which your attention is especially directed; the feeble pulse, which may result from the general debility, but also from the bile acting as a poison through the blood; and the absence of the dry itching of the skin, which is so usually present in jaundice.

Treatment.—We will apply dry cups to the lungs, and turpentine stupes; we will take a small quantity of blood over the region of the liver by means of the scarificator and cups. She may take two drachms of bitartrate of potash, dissolved in water, every four hours, alternating it with a teaspoonful of the following mixture, also every four hours:—

℞.—Vinum ipecac. gtt. x;
Potassæ acetatis, gr. x;
Spiritus ætheris nitrosi, gtt. xx. M.

The bitartrate of potash, like all the salines, has a peculiarly excellent effect upon the portal circulation, and the mixture will remedy the bronchial affection.

The use of remedies to relieve the portal congestion is here evidently indicated, and it is with this view that the treatment mentioned will be instituted. The short duration of the disease, or perhaps it may be its recent aggravation, show that within a short time there has been very considerable congestion of the liver, which we will endeavor to counteract as far as possible. Other agents may have to be employed as we obtain a fuller insight into the nature of the marked enlargement.

JEFFERSON MEDICAL COLLEGE.

SURGICAL CLINIC.

Service of Prof. Gross.

December 28, 1861.

FOREIGN BODY IN KNEE-JOINT.

This was a young man twenty years of age, a patient of Dr. Shive, of Bucks County. The case is one of three years' standing, but the patient has lately noticed the presence of a foreign body in the articulation. The joint is larger than natural; the ligament of the patella is relaxed; the synovial fluid is increased in quantity, making pouches on each side of the joint; there is no discoloration; has some pain on fatigue. The patella stands prominently out, and a grating noise is imparted by its movement under the finger, showing a roughness of the cartilage from the friction of the foreign body. This body can be felt distinctly, and is so exceedingly smooth and slippery in its character, as to jump about from side to side with the utmost agility. It is probably a loose cartilage, about the size of a small hickory-nut, and is located behind the patella, between the condyles of the femur. When it comes down, as the term is, the patient drops as if shot. These bodies are fibro-cartilaginous in their nature, the result of inflammation and the deposit of lymph. At first they are attached to the synovial membrane by a pedicle, afterward becoming detached by the friction of the joint. They are sometimes quite large in number—thirty-eight or forty have been taken from a single knee-joint. They vary in size also, and are always attended with more or less pain. The method of cure is removal. In former times this operation consisted in making a bold incision down upon them, and direct removal. In later times this operation has given place to that of removal, by subcutaneous incision through the synovial membrane, the object being to exclude the air from the joint. Through the opening thus made the body is forced by manipulation, and when fairly outside of the membrane, a bandage with compress is applied above, and also one below, from the foot up, so as to avoid unequal compression. In this position the foreign body is allowed to remain some days, when it may be cut out from underneath the skin without danger to the joint. To render this operation a successful one, and avoid inflammation, the patient should be previously purged, and restricted in diet. The limb should be kept at rest and the patient quiet. If inflammatory action arise, the sugar of lead solution may be applied warm, and anodynes may be used.

CHRONIC INFLAMMATION OF THE BLADDER.

This case was that of a man from the interior of the State, fifty years of age, always healthy. He ascribes the origin of his difficulty to hard labor in the war with Mexico. Micturition is painful and frequent, requiring him to pass water every half hour, and attended with burning sensation in extremity of penis. A sense of relief follows. Urine red in color, probably loaded with lithates. The flow of urine is not suddenly interrupted, as it might be if calculus were present, nor is there any inordinate straining required in passing it. Suspecting calculus, we introduce the sound, but detect none. Still it may exist, and the patient should be sounded again and again, till the diagnosis is clear. Meanwhile let him take the following mixture:—

℞.—Uva ursi, ℥j;
Humul. lup. ℥ss;
Aquæ bullientis, Ojss.

Boil to one quart, and take one-third of a tumbler of the mixture three or four times a day, adding half a teaspoonful bicarbonate of soda. The former of these remedies has a specific action upon the urinary passages; the latter upon the urine itself.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

CONSTIPATION.

In Dr. Ware's eighth lecture upon *General Therapeutics*, as published in the Boston *Med. and Surg. Journal* for September 26th, a few remarks are made that we consider worthy of quotation. Speaking of constipation and its treatment by medicines, he observes that the aim should not be to produce a cathartic action, but to produce as nearly as possible a natural discharge. To this end he would advise medicines in small doses, at meal times, or one dose at bedtime, so as to secure one motion in the morning. He then adds:—

"The article selected is of less consequence than the mode of giving it; but no method I have ever employed for the use of persons so persistently costive as to be obliged to depend upon medicine for its relief, has been so satisfactory as the combination of a large number of cathartic substances in small quantities in a single prescription, as in the following: ℞.—Aloes, one scruple; jalap and rhubarb, scammony, each sixteen grains; gamboge, five grains; tartrate of antimony, one grain; croton oil, one drop. Mix in 64 pills. Of these pills one taken during or directly after a meal, once, twice, or three times a day, will rarely operate medicinally, and will usually produce a natural fecal discharge.

"This method may be often pursued for years, without any necessity for an increase in the quantity, though this is not always the case; nor have I ever found that any evil has arisen from such continuance. Undoubtedly the large and habitual introduction of any medicinal substances into the stomach is to be avoided if possible, and no person should yield himself to such a habit when the end can be attained in any other way. Still, when we consider the constant errors of diet as to quantity and quality, of which most persons are daily guilty, and also their constant offenses against the laws of health in other respects, it is not too much to say that very few of us pass a day of our lives without some indulgence which is far more injurious than taking into the stomach a small quantity of medicine. I believe that the daily eating of newly-baked bread and butter, hot buttered toast, pastry and confectionery, short-cakes, rich soups and gravies, and puddings, might with very many individuals be advantageously exchanged for a few grains of aloes or rhubarb."

In cases of habitual costiveness, we have found it almost impossible to prevent patients from taking cathartics even against our positive orders. They are too apt to regard constipation as the primary difficulty, the cause of all their sufferings, and cathartics as the only remedies. Unwilling to take medicines daily and for some time, systematically and with a definite object in view, they let the bowels remain confined for several days, perhaps a week, and then give themselves a "thorough cleaning out," by taking an active cathartic, which rids them of fecal matters that should have been passed several days before. The bowels thus suffer from the unhealthy action of feces unnaturally retained and decomposing; and, again, by the unnecessarily harsh cathartic. These influences, if repeated long, will undermine the health of the most robust. Upon this point Dr. Ware has the following:—

"It cannot be too strongly impressed upon those who suffer from this infirmity, that the worst method of dealing with it is to permit several days to elapse without a movement, and then to procure one by taking a full dose, which shall operate as a cathartic, of such articles as jalap, senna, bilious pills, or even aloes and rhubarb. In this case the patient suffers in some degree the evil of the cathartic without the real benefit of an open state of the bowels, while the frequent use of such doses tends strongly to undermine the powers of the digestive organs."

NUX VOMICA AN ANTIDOTE TO ACONITE POISONING.

In the Boston *Med. and Surg. Journal* for September 26th, Dr. D. D. Hanson, of Hartford, reports a very interesting case of poisoning with aconite, in which relief was prompt and decided, following the administration of tincture of nux vomica. The patient was a boy five years of age, and had evidently taken a destructive dose of tincture of aconite, though the exact amount could not be ascertained. The doctor found his patient comatose.

"The pulse was feeble and irregular, respiration requiring artificial aid to support it, and the muscles and ligaments so much relaxed that he could neither stand up or sit unless supported. His respiration finally degenerated to a gasp, occurring five or six times the minute; then he would convulsively straighten out in the lap of his attendant, throw his head and shoulders back, and his hands over his head, as if, mechanically, to get a longer and fuller inspiration, then relax into the same state as before."

Truly these were alarming symptoms. The most powerful emetics produced no effect, so far as emptying the stomach was concerned.

It was evident the patient must soon sink unless the nerve centers, and through those, the muscular system, could be aroused to something like a normal action. Having this object in view, the doctor gave three drops of the tincture of nux vomica, and this was repeated after twenty minutes. At this point the emetics already administered operated. Three drops of the tincture was administered every three hours for twelve hours longer, and the patient was discharged cured.

Dr. Hanson says:—

"As a corollary to this, I think it may be said that nux vomica is a complete antidote to aconite, and, conversely, that aconite is equally an antidote to nux vomica. Nor is it unworthy of thought, that the antidotal powers of nux vomica may extend with equal force to the whole family of acro-narcotic and narcotic poisons."

VENTRAL HERNIA MISTAKEN FOR PREGNANCY.

Before the Boston Society for Medical Improvement, as per report in the Boston *Medical and Surgical Journal* for September 26th, Dr. Abbot reports a very interesting case of a lady, nearly forty years of age, who supposed herself pregnant and near her period of confinement. She was embarrassed by the fact that her catamenia returned regularly every month. On examination, the doctor found the enlargement to be from ventral hernia; "the motion which had been attributed to a fœtus was merely that of peristaltic motion." The case has not yet terminated, but we infer that the doctor supposes her not to be pregnant.

We have made mention of this case for the purpose of referring to one now under our observation.

About nine months ago, we were notified by a female friend—a married lady, aged forty years—that she was pregnant, and she wished to engage our watchful care and professional advice during her period of pregnancy, and assistance at her accouchement. She informed us that she had been many times pregnant, but had invariably miscarried at the end of the first, second, or third month.

We advised for the case, and heard no more of it, except that flowing occurred frequently, threatening an abortion. We inquired after the case often; but as it was some distance away, and symptoms not urgent, we did not visit the patient. We learned, however, that her periods of flowing and threatened abortion *occurred monthly and with very great regularity*. At the end of her ninth month, as she supposed, she began to flow. Pains in the bowels were an accompanying symptom, and the good lady expected she was about to be confined. Her lady friends were sent for, and then a messenger was dispatched for us. Being otherwise engaged, a medical neighbor saw the case. He spent the night with the patient and her lady friends, watching for the birth of the long-expected and desired child, with a great deal of solicitude. As day dawned, the doctor informed her she would not be confined that night, but that her desires and anticipations would probably be realized within a day or two.

Four weeks later we were called to the case. She had, she said, flowed about four quarts in the last two days; pains were quite severe, according to her statement, and she expected to be confined daily.

On examination, per vaginam, we informed the good woman that she would not be confined at present. She expressed great disappointment, and wept at her bad fortune. We cautiously, and with such tact as we could command, informed her that we doubted her pregnancy.

We will briefly allude to a few of the symptoms present:—

The lady, always regular, passed her monthly

for eight weeks. At the end of eight weeks she flowed more than usual, and she feared abortion. It was then she first consulted us. From this time her flowings have occurred regularly every four weeks. These flowings have been double or treble the normal amount. She has had morning sickness, enlargement of the abdomen and breasts, and, as she supposed, had felt motion for the last five months.

On examination, we could find no uterine tumor; the bowels seemed soft, and not distended as is usual in the last months of pregnancy. Her breasts, she knew, had doubled their normal size, and she was very confident of having experienced motion. Though naturally fleshy, and of excellent health, as are most of our English people, of whom she was one, at this time her health was below par. Her appetite was very poor, her countenance pale and sallow; her pulse quick, weak, and irritable; and the heart subject to palpitations on any considerable exertion. The bowels were not much distended, and what distention there was, we believe was owing to gaseous formations consequent upon imperfect digestion.

We advised the patient to give herself no uneasiness about herself, make no remarks about her case, to send out for no lady friends until she had first sent for us, and their invitation should be by our recommendation. We made a prescription with reference to the improvement of the lady's general health. At the time we saw her, she was sure she was *ten months advanced*. Six weeks have passed, and we have not heard from our patient, save to learn that she has not been confined, and that her health is better than for many previous months.

The supposed motions in this case were probably deceptions, caused by peristaltic action, or undue cardiac excitement. We may hereafter allude to the ultimatum in this case.

BLUE COHOSH, (CAULOPHYLLUM THALICTROÏDES.)

A week or two ago we had an article upon the *black cohosh*, in which the opinions of some of the most recent writers were expressed. In the *Journal of Materia Medica* for October, Dr. C. A. Lee has an article upon the *blue cohosh*. Having a strong desire to see our indigenous remedies more thoroughly investigated and relied upon, we shall make a quotation or two. Dr. Lee says:—

"Our experience satisfies us that it is a very efficient alterative; possessing diaphoretic, diuretic, and anthelmintic properties; that it exerts a special influence over the uterine organs, and controlling uterine contraction in a manner similar to ergot. It is also a remedy of known efficacy in dysmenorrhœa and amenorrhœa, as well as uterine leucorrhœa. Among the Chippeway Indians, on Lake Superior, we found a tea of the root employed by pregnant females for some time before confinement, to facilitate parturition.

"In rheumatism, it has been used with much success, especially in combination with small doses of iodide of potash. Its operation in such cases is very similar to that of the black cohosh, though some consider it more reliable. In chorea, it produces striking effects, being decidedly antispasmodic and tonic. In small doses, it restores tone to the digestive organs, while it improves and regulates the various secretions. In atonic dyspepsia, it may be used with great advantage, though not to the exclusion of other remedies."

In regard to its influence over uterine affections, he makes the following remark:—

"I would, however, advise its trial as an alterative in chronic uterine affections and derangement of the menstrual functions, as well as atony of the uterus causing tedious parturition. There is great reason to believe that its powers in such cases are underrated. In some cases it may be associated with iron, in others with iodine, with advantage; but in all cases, its use is to be continued for a considerable time."

In regard to its combinations and methods of use, we subjoin the following:—

"The plant is used in the same preparations as the black cohosh. The dose of the fluid extract, as an alterative tonic, is fifteen to thirty drops; of the solid extract, from one to three grains; of caulophyllin, one or two grains; of the infusion, made with one ounce of the bruised root to a pint of boiling water, one to three drachms; of the saturated tincture, thirty drops; of the syrup, one to two drachms. The following mixture has been given with good results in amenorrhœa, dysmenorrhœa, and other chronic affections:—

℞.—Fluid extract of blue cohosh, ℥ij;
" " ergot, ℥j;
" " water pepper, ℥j;
" " savin, ℥ij.

M. Dose, twenty to forty drops two or three times a day.

"The following combination has been highly recommended in unhealthy conditions of the uterus and appendages, and as an antispasmodic in epilepsy, hysteria, and chorea, and as a stimulating general alterative:—

℞.—Caulophyllin, 12 grs.;
Cimicifugin, 12 grs.;
Carbonate of ammonia, 12 grs.

M. Dose, three to six grains.

"A mixture of twelve grains of caulophyllin, ten grains of podophyllin, and ten of mur. of ammonia, has been used with benefit, in doses of three grains, in nephritic diseases, accompanied with pains of a spasmodic character. Another combination of some reputation, is ten grains of caulophyllin and eight grains of dioscorein, of which three to six grains are given in bilious colic and flatulence."

HEAT AND COLD AS AFFECTING THE TEETH.

Some months ago we referred to the opinions of Dr. Robertson, relative to the influence that mercurials had upon the teeth. We quoted from the *Dental Cosmos*. As our article was prepared for the *A. M. Monthly*, we will recapitulate here a remark or two. Our readers are doubtless sadly aware of the fact that many people attribute the decay of their teeth to the effects of medicine:—

"A common expression with such is, 'since my health has been bad, I have taken so much medicine that it has ruined my teeth.' Such forget that good health is all-important to the integrity of the teeth—they do not imagine that it is *disease* and not *medicine* that causes their decay. In the *Dental Comos* for June, Dr. Robertson has an article upon the *effects of disease on the teeth*, in which the above fact is distinctly stated. We rejoice to see a dental surgeon vindicating the honor of medicine. Dr. Robertson, while he admits that the '*surroundings*' may be injured, denies even that calomel has any direct influence in causing the decay of teeth. We quote one experiment: 'Dr. Westcott, in his experiments, found that teeth placed in a mixture of calomel and water of about the consistency of cream, and allowed to remain there for four months, came out as bright and as clean as when they were put in. And some years ago I placed one tooth, thoroughly cleansed from all foreign matter, into a phial with fifty grains of calomel mixed with about two or three fluid drachms of saliva, and at the end of six weeks no change was perceptible even by the aid of a powerful magnifying glass.' * * * * * * 'Having now shown that *medicines*, judiciously exhibited and properly administered, do not, and generally cannot injure the teeth, and that many, if not most, *diseases* do, and of necessity must injure them more or less, I cannot refrain from adding that the *injudicious* exhibition and improper administration of medicines, and more especially the drenching themselves with quack nostrums, to which our people are so strongly prone, as uniformly do, and must, produce ill effects on these organs.' * * * * 'Hence, a safe general rule in relation to quack nostrums is, that any time is an *improper time*, and any quantity is an *improper quantity;* and this is true of all stages of existence, from earliest youth to decrepit age. But medicines, when so administered as to secure the object for which they were given—the restoration of the secretions from an abnormal to their normal condition, the restoration of the body from disease to health—instead of injuring the teeth, protect them from injury.'"

Returning to our subject, as regards temperature over teeth and their fillings, we quote the following from an editorial article in the *Dental Cosmos* for September, by Dr. J. H. McQuillen. We have space but for one extract:—

"On a former occasion we referred to experiments performed by Dr. Flagg and self, to test the correctness of the oft-repeated assertion that the practice of drinking ice-cold water and hot coffee or tea at the same meal is liable to fracture the enamel. As stated on that occasion, several teeth were repeatedly immersed in water at the boiling point, and suddenly removed from that and thrown into ice-cold water, without making an apparent impression upon any of them. Desiring to obtain a section of enamel for microscopical purposes we adopted that course to secure it, but found at last that it could only be accomplished by subjecting the tooth to a dry heat, when the enamel readily separated from the dentine.

"If our impression is correct that tooth substance is very slightly affected by the variations of temperature to which it is subjected in the living body, it is only necessary to consider the probable changes produced in gold fillings by the same influences. According to the table presented, when a gold bar is passed from 32° to 212° it is found to expand 1·682 of an inch; in other words, a gold rod 682 inches long would be increased exactly one inch in length—the same ratio of expansion, of course, taking place in every direction. Now, in the mouth, neither gold or anything else is subject to a higher temperature than 140°, and the variation does not start from 32° and run upward, but it commences at 98° (temperature of the mouth) and from that point varies between 32° and 140°, according to the temperature of the solids or fluids introduced. Taking into consideration, then, the infinitesimal expansion which occurs in passing gold *from* the freezing to the boiling point of water, it appears exceedingly doubtful whether the variation to which that metal is subjected in the mouth can be justly regarded as a force sufficiently expulsive to drive fillings from their cavities."

VAGINISMUS.

At a late meeting of the Obstetrical Society of London, Dr. J. Marion Sims, of New York, read a paper on what he termed vaginismus. The following report of his remarks, and the discussion which followed, is from the London *Medical Times and Gazette*:—

"By the term 'vaginismus' the author proposes to designate an involuntary spasmodic closure of the mouth of the vagina, attended with such excessive super-sensitiveness as to form a complete barrier to coition. This affection may be complicated with inflammation, but it does not depend upon it; and in the most perfect examples which Dr. Marion Sims had witnessed, there was no such complication. Vaginismus can only be confounded with impermeable hymen, or with atresia. In each of these two cases marriage may have existed without consummation, but the true cause is patent on investigation. In an example of vaginismus the gentlest touch with the finger produces excruciating agony. The sensitiveness is at all parts of the vaginal outlet; but often the most tender part of all is at the fourchette just where the hymen projects upward, or, again, at the orifice of the vulvo-vaginal gland. The treatment consists in the removal of the hymen, the incision of the vaginal orifice, and subsequent dilatation. The way in which these operations are to be performed was fully described; and the paper concluded with some general observations to show why the term 'vaginismus' had been chosen for this disease.

"Dr. Oldham thought that there were few obstetricians of much experience who had not met with cases of a similar nature to those noticed by the author. He reminded the Society that some years ago he had described some cases where these painful symptoms were present, but which he had connected with inflammatory conditions of the follicles of the vulva. He had since that time kept a record of similar cases, and he did not call to his recollection any instance where there was not that condition present. He had found almost every case amenable to a sedative plan of treatment, and condemned the use of caustics.

"Dr. J. Braxton Hicks had seen one such case in which the whole membrane of the vulva was rough with small papillæ; and he considered that the exquisite tenderness in this case was owing to a diseased condition of the sensitive papillæ.

"Dr. Tyler Smith said that Dr. Marion Sims had given a name to a condition which he thought was far from uncommon in this country. Excessive sensibility and spasm of the vagina were sometimes quite distinct from vaginitis, and might be present when no disease of the mucous membrane existed. He had always considered it as hysterical spasm of the sphincter vaginæ, and treated it by division and dilatation. He had known such a condition interfere with intercourse for thirty years.

"Dr. Tanner thought that the cases described by Dr. Sims, and those alluded to by Dr. Oldham, were quite distinct in their nature. As regards follicular inflammation of the vulva, Dr. Tanner was happy to bear witness to the accurate description of this troublesome disease which had been given by Dr. Oldham. Such cases were only to be cured by attention to the general health and sedative local applications. All irritating lotions or ointments did great mischief.

"Mr. Spencer Wells could support Dr. Tyler Smith's statement, that these cases were sometimes seen without any follicular disease about the vulva. He had seen such a case where connection had been impossible for three years after marriage. There was no hymen, or merely a rudimentary fold of mucous membrane offering no impediment. This case was completely cured by introducing one of Bourjeaurd's cylindrical air-pessaries under chloroform, and keeping up dilatation for a few days."

ARTIFICIAL ANUS IN THE LUMBAR REGION.

A very interesting case, in which an operation for such an anus was performed, has been published in the *Bulletin de Thérapeutique* of October 30th. The child was born with an imperforate anus in 1852; and, in spite of a very careful and prolonged dissection, the late M. Amussat could not find, though his finger reached quite within the pelvis, the cul-de-sac of the imperforate bowel. It was now a question whether the search should be carried further and at random into the pelvis, or whether a lumbar anus should be made. M. Amussat, on consultation with the medical men present, among whom was his son, decided on the latter measure. By a careful dissection, the colon was reached, and gases escaped. Notwithstanding the severity of the two operations, the child did well, and the motions passed through the abnormal orifice, the patency of which had been secured in the usual way. Six days after the operation, MM. Cloquet, Velpeau, and Jobert were called in consultation to decide upon further steps. It was agreed that no renewed attempts should be made on the natural imperforate anus, and no fresh operation at that period undertaken. At six months old the child was well and cheerful, evacuations regularly taking place at the lumbar opening, the new aperture being usually stopped by a wax plug. M. Amussat, Jr., had an opportunity in 1859, seven years after the operation performed by his late father, of seeing the little boy. The latter was quite well and lively, notwithstanding the artificial anus, the evacuative functions having been very regular in their performance. The child wears in the aperture a wax bougie, fastened by an elastic belt.—*Lancet.*

CONDITION OF THE STUMP AFTER PIROGOFF'S OPERATION.

On the 26th ult. we had an opportunity of examining the stump of a man on whom Mr. Bryant had performed Pirogoff's amputation, fifteen months previously; and, as it is not a common form of operation, it is as well, perhaps, to chronicle the result.

Mr. Bryant, in introducing the patient to his class, dwelt upon the importance of showing the

results of operations, and added that he had much pleasure in bringing before their notice the man upon whom he had performed Pirogoff's amputation, as the result had been so entirely satisfactory. The patient was thirty years of age, and the foot had been removed for rapid disorganization of the tarsal joint. The stump, as might be seen, was quite perfect, any amount of pressure being tolerated without the slightest pain or inconvenience being experienced. The man could walk and take exercise as well as ever, and could support the weight of the body upon the amputated limb as well as on the sound one; indeed, as the patient expressed it, the limb was just as good as its fellow for all purposes of support.

Mr. Bryant explained that "Pirogoff's" amputation at the ankle differed from "Syme's," in which the divided extremities of the tibia and fibula were only protected by the integument of the heel, by the fact that in the former the extremity of the os calcis was also retained, which, in the case before him, had become firmly united to the resected extremities of the tibia and fibula. By this operation not only was the natural pad of integument preserved, but the bony heel itself was maintained; and the inconvenience and distress too often experienced by persons upon the divided extremities of the bones were done away with. He did not think that any one, after examination of this stump, could doubt which was the better of the two operations, and added that in all cases in which amputation at the ankle was required, Pirogoff's operation should be preferred if it could be performed.—*Guy's Hospital Reports.*

PURPURA HÆMORRHAGICA, SUCCESSFULLY TREATED WITH TINCTURE OF THE MURIATE OF IRON.

I was called in to visit M. B., aged 14 years, on the 3d instant. Her complexion is fair, with ruddy cheeks, and her general conformation rather delicate. Family history bad. Mother and father both died of phthisis, as also some uncles and aunts. The patient has never menstruated. Her health has been pretty good, but for the last fortnight she has complained of feeling weak and languid, being indisposed for exertion of any kind. A cough came on a fortnight ago, which has disturbed her a good deal at night. There has been very little if any expectoration with the cough; believes she caught cold, since which she has been getting gradually worse. She states she has no pain in her chest, but there is a sense of dull uneasiness in the lower sternal region, not amounting to actual pain. Pulse 132; tongue coated with a thick layer of yellowish-white epithelium. Has never vomited, but feels nausea.

On examining the lungs, nothing unusual was discovered, with the exception of a little mucous *râle* in the posterior and lower aspect of each. Percussion sound not perceptibly altered. She has been living in a large town, at some distance from her native place, a healthy country village, and has been subject to be much confined in-doors, her employment having been that of a domestic servant.

A blister was ordered to be applied to the chest, over the seat of uneasiness, and a cough mixture prescribed, containing squills and compound tincture of camphor; also a pill at bedtime for three nights, consisting of pil. hydrarg. gr. j, pil. rhei. co. gr. ijss.

On visiting her two days afterward she expressed herself as relieved in her chest, uneasiness less; her breathing more free; but she mentions having bled at the nose to a considerable extent on two occasions since my last visit, and that she feels weaker.

Two days after I again saw the patient, and found that over her arms, neck, and face, a "rash" had made its appearance, which rash proved on inspection to be petechiæ. The spots varied in size, but the average measurement would be about four or five lines in diameter. Their color was a dark purple, inclining almost to black. The spots were not confined to arms, face, and neck, but existed also on the legs, chest, abdomen, etc. Pulse still 130 per minute; tongue much as at my first visit. Patient mentions having again bled at the nose, and had also expectorated a little blood, about a teaspoonful; and had, moreover, passed something very dark in her urine. I at once saw that she had hæmaturia, which had at least been going on for some hours. From the amount of pain complained of in the iliac and lumbar regions of both sides, I concluded the blood had come from the kidneys or the ureters in the neighborhood of the kidneys. The quantity of blood mixed with the urine must have been considerable. The patient's appearance had now much changed, she looked pale and anæmic, and complained of great weakness and general prostration.

Thinking this a favorable case for the trial of the tincture of the muriate of iron, so highly spoken of by some French physicians, I prescribed two drachms of it in an eight-ounce mixture, of which a tablespoonful was to be taken every two hours. Diet to consist of good fresh meat, mutton or beef, with beef-tea, and bitter beer after dinner. She now informed me that she had not eaten meat for a length of time, because she had had no relish for it. On my explaining to her the necessity for it, she consented to try to eat it, and drink beef-tea. On the day following, the bleedings had ceased, her urine was clear, and quite free from any semblance of blood; her appetite, too, was better. She had eaten a few mouthfuls of meat, and had drank a good deal of beef-tea. Pulse still keeps high, and the petechiæ are the same in appearance as described above. Two days later the improvement noted as having begun at my last visit continued to go on steadily, and the patient expresses herself as much better. Her appetite is increasing, and her tongue fast cleaning. Pulse lowered to 100; hemorrhages have not recurred.

From this time the patient steadily, gradually,

and I may say quickly progressed toward recovery. In a few days more the spots had nearly all disappeared, her strength and appetite increased rapidly, and the pulse came down to 85 beats per minute—a striking alteration.

From the foregoing facts I think it is quite evident that, in this case at least, the patient owed her rapid and good recovery to the muriate of iron mainly, and though I am disposed to believe that the change in the diet was no mean adjuvant in her case, I am satisfied that the iron was the chief cause of the alteration in the state of the patient's blood, or capillaries, or both, which led to the re-establishment of her health. Within twenty-four hours after taking the first dose the hæmaturia had entirely ceased, and the epistaxis and hæmoptysis did not recur. The effect of the iron on the stomach and tongue was no less observable than in the case of the hemorrhages, for the appetite and tongue improved perceptibly soon thereafter.—*Dr. James Wood, in Med. Times and Gazette.*

ACUPUNCTURE OF THE HEART IN SUSPECTED DEATH.

M. Plouviez having performed numerous experiments upon animals, with the object of determining the value of acupuncture of the heart as a means of diagnosis in apparent death, a committee appointed by the Paris Medico-Practical Society terminates a long report with the following conclusions: 1. Acupuncture of the heart employed as a means of distinguishing real from apparent death is an improvement upon auscultation, inasmuch that it is a means more easy of observation and of greater precision, for even when auscultation leads to the belief of the inertia of the heart's action, the needle may, by its oscillations, demonstrate that the action still exists. 2. As far as the experiments on animals prove it, there is no danger in the employment of this means. 3. The oscillations, even after auscultation has proved of no avail, denote the probability of the return of life, the certainty and rapidity of such return depending upon the circumstances which have caused death and the means employed to secure recovery. 4. The exact determination of the amount of utility derivable from the employment of the needle can only be arrived at after future investigations.—*Union Méd.* and *Med. Times and Gazette.*

DR. LANGSTON PARKER ON THE USE OF MERCURY IN THE TREATMENT OF PRIMARY SYPHILIS.

The principal facts inculcated by the author are embodied in the subjoined *résumé :*—

1. That mercury is not indicated as a specific agent in the treatment of the soft or simple chancre which secretes pus freely, which has no induration of its base, and no complication in the groin.

2. That mercury is not indicated as a specific therapeutic agent in the treatment of the adenitis which complicates this form of chancre, whether the tumor be of a benign or virulent character.

3. That mercury is not indicated in the treatment of the inguinal chancre which succeeds to the opening or the bursting of a virulent bubo.

4. That mercury may be tried when this form of chancre, or the attendant inguinal chancre, is perfectly chronic, and has resisted the usual routine of non-mercurial treatment. In the earlier stages of these diseases mercury is positively injurious; but in the perfectly chronic stage, as a *dernier ressort*, it may be tried, and occasionally, but not certainly, its use is attended with benefit. In such states a moist mercurial fumigation is sometimes efficacious—a fact which Mr. Parker has ascertained in several instances.

5. Mercury is occasionally useful in the treatment of the phlegmoid induration which sometimes accompanies soft chancres; here its action is limited to the removal of the induration; it has no influence in dispersing either of the forms of adenitis which may complicate it.

6. Mercury is indicated as a specific agent in the treatment of the infecting or specifically indurated chancre. It is the most powerful and certain therapeutic that can be opposed to it. It resolves the indolent buboes which almost always accompany this chancre, and which remain stationary or continue to increase until mercury is used. It weakens or altogether eradicates the dyscrasia, or constitution taint, of which this chancre is the initiatory symptom.

7. Mercury may be given internally, and by way of friction, or administered in the form of vapor. There are cases in which each of these modes may find its special application. Generally speaking, the internal administration is the most injurious to the patient and the least efficacious in its influence on the disease.—*Med. Times and Gazette.*

CAUSE AND CURE OF TAPE-WORM.

In his clinique at the Queen's Hospital, Dr. Fleming has frequently made the cause and cure of tape-worm the subject of clinical remark. This affection prevails to a wide extent in Birmingham, and is often seen in its more severe forms among the out-patients. As compared with Edinburgh, Dr. Fleming observes, that the greater frequency and severity of the disease are very marked. The patients may often be recognized on entering the consultation-room by their worn, vacant aspect,—their trembling gait and hands, staring eyes, and hesitating manner. Many suffer for years, with alternate periods of aggravation and improvement. Of the relation of cause and effect between the measle of the pig, or *cysticercus cellulosæ*, and tape-worm, this town affords ample evidence. Dr. Fleming has ascertained that large quantities of measly pork are sold and used as food in Birmingham. It is not exposed for sale in the public markets, but is disposed of privately, and, doubtless, much of it is employed in the manufacture of sausages. These

are made use of to a large extent by the working classes, and are frequently eaten imperfectly cooked or nearly raw. Dr. Fleming and Mr. Lloyd have found portions of the "measle" in the sausages, with the microscope. Although the worm must be for the most part destroyed in the mincing, it may sometimes escape sufficiently intact to renew its life in the bowels of an unhappy artisan.

Dr. Fleming has made comparative trials of several vermicides in the tape-worm; among others of male fern, kamala, koosso, and spigelia. All are useful. but Dr. Fleming finds the first to be the most efficient and the safest. He gives it thus: ℞.—Ol. filicis, 3j; mist. acaciæ, ℥ss. M. ft. haust. To be mixed with an ounce and a half of sweet milk and taken at bedtime. The patient must omit the dinner and evening meal of that day. Taken thus, on an empty stomach, the mixture is carried speedily into the intestines, to feed, and, at the same time, poison the hungry parasite which nestles there. Milk is the favorite food of the worm. A large experience leaves no doubt of the great efficiency of this medication. In 1857 Dr. Fleming obtained a supply of the kamala from Dr. Anderson, of the H.E.I.C.S., and was one of the first to use that drug in this country. As a worm-killer, it is often very efficacious, but less so than the male fern; while its action on the bowels and secondary depression of the system are often unduly severe. — *Med. Times and Gazette.*

HYDROCHLORATE OF AMMONIA.

There is a remarkable similarity in the general effects of this salt and the chlorate of potassa. The Germans, especially, have long placed an estimate upon it as an alterative, which has surprised those who have not had considerable experience in its use. Lotions of varying degrees of strength of solution may, in the large proportion of cases, be advantageously substituted for the more expensive stimulating liniments usually directed. It thus forms a cheap and efficient rubefacient and discutient, well adapted for prescription in general practice. In many forms of cutaneous disease, characterized by temporary improvement under the application of local remedies of a stimulating nature, it is particularly beneficial. Thus, it is especially useful, both exhibited internally and employed externally, in connection with the arsenicals in treatment of original squamous affections, and where, in other varieties of tegumentary eruption, the furfuraceous surface is presented. Acne is often well controlled by its local application. As a discutient of slow glandular enlargements, it may rank with or next to iodine, and has the advantage that it does not discolor the part of application.

As an alterative, liquefacient, resolvent, or promovent of cell and tissue metamorphosis, it is worthy of the high rank which our German confreres assign it—ordinarily improving digestion and renovating the secretions in a marked degree. Western practitioners, who have had much experience with it, given in full doses, in combination with quina, assert that the system is left in a much better condition than when the latter is given singly, and that the necessity for administration of mercurial and other cathartics is very materially lessened or altogether removed.

The same peculiarities fit it for valuable exhibition in many obscure neuroses, where defective irregular innervation is the prominent symptom. We beg leave to recall the attention of the profession to this old remedy, as well worthy more frequent trial than it now receives, sensible, as we are, that, under judicious use, it will by no means as frequently disappoint in result as many newer and more fashionable medicines.—*Chicago Medical Journal.*

ON THE CAUSE AND TREATMENT OF STERTOR.

The cause of the loud and deep laryngeal sound which is known as stertor, is in general owing either to a partial paralysis of the soft palate, or to a falling backward of the paralyzed tongue, or to a collection of mucus in the pharynx and air-passages. In repeating Marshall Hall's experiments on respiration, the author found that the closure of the pharynx by the tongue was the usual cause why air would not penetrate into the lungs. On the other hand, when the body was placed in such a position that the partially-paralyzed tongue would fall away from the posterior wall of the pharynx, artificial respiration was easily carried on. This fact proves of how much importance is the position of the body in attempts at resuscitation. Syme relates that he saved a patient who was threatened with asphyxia from chloroform. by simply pulling forward the paralyzed tongue by means of a hook. The author brings forward cases in which stertorous breathing was entirely removed by merely changing the position of the patient. One is a case of sudden apoplexy, in which the stertorous breathing was arrested by merely turning the patient on her side. The second is a case in which a man, dying from inflammation of an emphysematous lung, had the stertorous breathing removed and his life apparently prolonged by the same means. The third case was one of stertor, following a succession of epileptic fits; here the stertor was relieved, and recovery undoubtedly hastened, by placing the patient on his side. A fourth case is one of typhus, in which the patient was dying in a state of coma. The author then observes: The change of position must, of all the parts concerned in giving rise to stertor, affect principally the tongue. When the mouth is shut, the lower jaw is almost at right angles to the spine, and the symphysis is then farthest removed from the vertebral column; the root of the tongue does not come into contact with the posterior wall of the pharynx, on account of the muscles that hold it forward, the genio- and hyo-glossus not being long enough. But on opening the mouth, or by anteflexion of the head, the

symphysis of the jaw describes a curve in the direction of downward and backward, and the root of the tongue must approach the posterior wall of the pharynx—a fact which was proved by direct observation on the dead body.

In experiments performed on himself, the author found that snoring and stertorous breathing through the mouth were not easily produced when lying on the back with the mouth open and the head bent backward. Deep, vibrating snoring during sleep, with the mouth shut, is owing to the nasal pharyngeal opening being obstructed by the tongue pushing the soft palate upward, which is thus thrown into vibration by the passage of the air. Sometimes the soft palate sinks down on the tongue, the mouth being half opened, and vibrations are then produced. These two varieties of stertor are described as "palatine stertor." The rough, sharp sound which is heard in apoplectic patients, with the mouth wide open, is formed low in the pharynx, and is caused by the passage of the air to the lungs being obstructed in consequence of the root of the tongue closely approaching the posterior wall of the pharynx; this is pharyngeal stertor.

The above observations meet with their application in the treatment of apoplexy. In those cases, for instance, in which no effusion of blood has taken place, but where there is only cerebral congestion, caused either by valvular heart disease, aneurism, or derangement in the pulmonary circulation, it is evident that everything that tends to obstruct the circulation must exert a most injurious influence on the disease. For instance, a subject of diseased heart, after some violent exertion, is seized with apoplexy. Placed in bed, and laid, as is generally the case, on the back, his breathing suddenly becomes stertorous, respiration is rendered more difficult, congestion of the lungs follows, the right side of the heart is overloaded with blood, the veins of the neck and brain become gorged with half-oxidized blood—which engorgement acts as a mechanical cause for effusion, to take place from the already overloaded cerebral vessels. If the patient, however, is placed in a proper position, respiration will go on freely, and his chance of recovery will certainly be increased. More particularly is this the case when the cerebral congestion is connected with a diseased state of the arteries, as is so frequently the case, as under such circumstances even a moderate obstruction to the circulation will act as a cause of effusion. In other cases of apoplexy where effusion has already taken place, particularly as the result of fracture, our chance of saving the patient with appropriate treatment will be much diminished if the respiration is stertorous, so that the return of venous blood from the injured part is interfered with. In many such cases the mere change of the position of the patient may decide the question as to his death or recovery.—Dr. Bowles, *Schmidt's Jahrbücher; Pacif. Med. Journ.*

REVIEWS AND BOOK NOTICES.

A Treatise on the Practice of Medcine. By Edwin R. Maxson, M.D., formerly Lecturer on the Institutes and Practice of Medicine in the Geneva Medical College. Octavo, pp. 705. Lindsay and Blakiston, Philadelphia. From the Author. (Second Notice.)

To enter the arena with Watson, Wood, Dunglison, Drake, Dickson, etc., and compete for public favor, is a no small undertaking. As to attractiveness of style, Watson's work is unsurpassed; but calomel and blood-letting enter quite too largely into his means of cure to meet the requirements of the present age and the modification of diseased action, as it at present manifests itself. Wood's and Dunglison's Practice are both erudite and reliable works, but are rather too voluminous to serve as text-books for students.

After a tolerably careful examination of the work before us, we are disposed to regard it as a valuable addition to our medical literature. In its pathological views, or therapeutical directions, the work is not particularly original, nor is it in style and matter unamenable to criticism. In some modern works upon practice of medicine, the authors give a great variety of opinions as to the different methods of treating the various diseases, but almost invariably withhold their own. Thus, the student and young practitioner are embarrassed in their search for the *very best treatment* of any disease that may be under consideration.

In the work before us, there is no such embarrassment; the author's own opinions are brought prominently forward, and the opinions of others are quite rarely referred to. This, to the reader, betokens a little vanity, or an idea of self-sufficiency on the part of the author. He, however, disclaims any such feeling, and says: "While I have preferred to give my own opinion of remedies, and in fact of almost everything else of which I have treated, it has been from no feeling of ostentation, but simply because I believe I am better qualified to give my own opinion than to hold up the opinions of other men, which in turn they can do much better than I could do it for them." We consider it no detriment, in a work upon the theory and practice of medicine, to find an author's own views distinctly stated.

In the work before us, many of the most approved new remedies and new preparations are introduced—a novelty never before attempted in a work of the kind. The author's therapeutic directions are concisely given, based upon distinctly stated indications, and mostly on a level with the present advanced condition of the healing art. There are a few exceptions to this; but we have not the space to specify. We will simply instance his treatment of acute dysentery. Five grains of Dover's powder, with *two of tannin*—every four or six hours—is not the best treatment for this disease, even if it has been preceded by a cathartic of calomel and rhubarb.

We should be happy to analyze the work, and thus give our readers an idea of its contents and merits, but want of space forbids. Suffice it to say, the work will pay perusal, and the student and practitioner will find it a safe guide in practice. The publishers have done their part in admirable style. O. C. G.

Republication of the London Lancet. New York: James Herald, No. 24 Ann Street. Monthly. $5 per annum.

It may not be generally understood by the profession that the *Lancet*, in its original form, is published weekly. In this country it is republished as a monthly, and all the more important portions of its weekly issue are thus placed, at about one-half the original subscription price, in the hands of those who patronize it.

Those of our readers who, in addition to their domestic journals, wish to take a foreign one, cannot do better than to subscribe for the *London Lancet*. It is an old and popular journal; from the first it took a high rank, and has ever since maintained its popularity with the more intelligent members of the profession. An evidence of its popularity is found in the fact that it has been *republished* in this country sixteen years; and now, when more than half of our own journals have been discontinued because of the troublous times, its republication is continued. We never would advise an American physician to subscribe for a foreign journal, who did not take one or more published in his own country. With a journal that, besides its unsurpassed original matter, *gives a complete summary of all practical matters in all our domestic journals*, as does the Reporter, the addition of a foreign one like the *Lancet* will post the reader thoroughly in all medical matters. O. C. G.

The Principles and Practice of Obstetrics. By Gunning S. Bedford, A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York. Author of Clinical Lectures on the Diseases of Women and Children. New York: Samuel S. & William Wood, 389 Broadway. 1861, pp. 750. Price $4 50.

We have read no work upon this most important branch of medicine for many years, which has afforded us so much unalloyed pleasure, gratification, and profit. It consists of forty-six lectures, the substance of which was delivered to the students of the University of the City of New York. The style is not, therefore, of that cold, didactic character which freezes the reader as he peruses its exactly measured sentences, and which operates as a soporific upon all his senses; it is plain, fresh—welling up from an exuberant fountain—compact. The thought intended is accurately conveyed in appropriate language, and the whole work exhibits the careful preparation of the successful teacher.

As the author of an excellent work on "Diseases of Women and Children," the seventh edition of which is soon to be issued from the press, Dr. Bedford is not unknown to professional fame. The favorable reception of that work has prepared the way for the one now issued. In this work, the author "presents to the profession a practical book;" and hence enters into all the minutiæ of the lying-in room, giving the young practitioner just the instruction which, as a tyro, he absolutely needs. If, in this respect, the instructions shall appear too minute and verbose to the older practitioner for a scientific work on obstetrics, he should bear in mind that the author had before him one great cardinal object, "to be useful;" and that this feature will render his work doubly valuable to the student. While, therefore, the latter may regard it as a guide which will conduct him safely and surely through the labyrinths of the art, the former can hardly fail to derive some lasting benefit from the results of twenty years of teaching, and a much longer period of well-cultivated observation and experience, which are embodied in its pages. The plan and arrangement of the work is at once comprehensive, systematic, complete, and fully posted up to the existing state of the science. Whatever new ideas of real value have been enunciated are incorporated in its pages.

On the use of instruments, the author is conservative. He regards the "proper employment of the forceps as one of the undoubted boons which science has placed within the reach of the conscientious and skillful accoucheur," but "in reckless and unskillful hands, as an instrument of fearful destruction." While, therefore, he condemns their indiscriminate use on every fancied necessity, he would not have the practitioner fail to use them when a "moral justification" exists, or when their use "shall secure the maximum of good, viz., safety both to mother and child." And he enforces these precepts with practical illustrations from his own experience and observation. So, also, in regard to anæsthetics. Considering parturition as a natural process, strictly speaking a physiological function, he would tolerate no interference with it, so long as its exercise is normal; and would employ anæsthesia only in cases of exaggerated suffering. His views upon these points are not only eminently conservative, but strictly in accordance with the dictates of humanity and of science.

The work is admirably illustrated and elegantly printed. It has received the high encomiums of the foreign medical press, so far as notices of it have come to our knowledge, and we have no doubt it will be regarded as a standard authority in obstetrical science.

Dr. David Wooster, editor of the *Pacific Medical and Surgical Journal*, has been appointed Medical Director for the Army, of the Department of the Pacific. He has resigned the editorship of the journal, which has been assumed by Dr. James Blake, late of Sacramento.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, JANUARY 25, 1862.

REMOVAL.—The office of the Reporter has been removed to the N. E. corner of Seventh and Sansom Streets, below Chestnut. Correspondents will be careful to note the change. tf.

THE SANITARY COMMISSION—*CUI BONO?*

On the thirteenth day of June, 1861, a little more than seven months ago, the Sanitary Commission, which has figured so prominently before the public eye since, was ushered into existence. The signature of the President gave the finishing touch to the appointment. On the same day its plan of organization was adopted and approved by the Secretary of War, and its wheels set in motion. Its members sought no "pecuniary remuneration from the government." Indeed the suggestion of such compensation was thought to be derogatory to the dignity and independence of the Commission. "Its motives being humane and patriotic, its labors will be its own reward." It grew "out of no charges of negligence or incompetency in the war department or the medical bureau." "One of its highest ambitions is to bring the volunteers, with which it is chiefly concerned, up to the regulars in respect of sanitary regulations and customs." Committees and sub-committees were duly appointed, and by the most impassioned, stirring, importunate language, the sympathies of the people were roused in its behalf. Contributions were solicited, of money, of supplies of every description for the wants of the poor soldier. Their pleadings, based upon actual facts of suffering and want in the camps of the raw recruits, who had been hurried off to the war without giving time for complete preparation, or hardly knowing what was needed for their comfort or convenience, were not in vain. The Sanitary Commission became at once the center toward which fond hearts looked as a medium through which their overflowing sympathies might find ample vent. Till recently its working staff consisted of a secretary and treasurer, and six inspectors. The number is now increased to fourteen, (all of whom are physicians,) at a salary of twelve hundred dollars each per annum. The duty of these inspectors is twofold:—

First, they "travel from camp to camp, pointing out defects and suggesting improvements in camp police, ventilation of tents and quarters, drainage, camp-cooking, the supply and quality of water, and generally in everything that bears on the health of the command."

Secondly, they are to "give officers in charge of military hospitals not only professional aid, if desired, but extra hospital clothing, food, medicines, vaccine virus, and stores not included in the government supply-list, or which the government cannot promptly provide."

The secretary and treasurer, we believe, both of them receive also liberal salaries, and there are six other gentlemen who are assigned to special duties. These are the working agents by whose inspection, inquiry, and advice, the important objects in view are to be accomplished; and to aid the Commission in their great and arduous labors, the government has given them every facility they required. A storehouse for its supplies is provided; offices in which to transact its business are furnished; "horses, ambulances, army wagons, for its inspectors and other agents, and every facility for visiting camps, hospitals, and military posts," are supplied gratuitously. Moreover, the officers of the army were all instructed to further their inquiries, and the privilege is also granted of freely corresponding with the war department and with the medical bureau.

With all these excellent facilities for the prosecution of its humane and patriotic work, what are the results the Commission has achieved?

Here we are met by a statement purporting to come from the Commission, through its officers, which affords but little promise of marked success in our inquiry after results. They say:—

"The result of a large portion of its (the commission's) labors is necessarily *negative*. So far as they are successful, *they furnish* nothing that can be stated in a definite, tangible form."

Notwithstanding this somewhat unpropitious announcement, let us proceed with our investigation. We use the late report of the secretary of the Commission as our authority.

It has visited every camp from St. Louis to the Potomac, and inspected every regiment, ascertained the quality of food and water, cooking, ventilation, police regulations, clothing and hospital accommodations provided for the men. It has ascertained precisely how many of the army are native Americans and how many are foreign born—a point, it must be confessed, of large practical importance in a sanitary point of view, and especially in a war in which nativity, sects, and parties are all obliterated by the common outbursting of patriotism and love of

country. We almost wonder the Commission did not extend its inquiries a step further, and tell the world what sects were predominant in the army.

In regard to cleanliness of camps, they say 5 per cent. are in admirable order; 45 per cent. fairly clean and well policed; 26 per cent. negligent and slovenly; and 24 per cent. filthy and dangerous. So large an army was probably never so well supplied with clothing. The regulation articles of food are "acknowledged to be had in great abundance, and their quality, in nearly all respects, is satisfactory to the men." In respect to hospitals and hospital arrangements, they tell us that in the 200 regiments, 105 have good regimental hospitals; 52 indifferent or tolerable; 26 bad; and 13 have none. From four no report was obtained. The average constant number of sick per 1000 men has been 63; in the department of Western Virginia, 62; in the valley of the Mississippi, 116. The average mortality of the army of the Potomac has been 3½ per cent., or for the whole army 5 per cent. Of the regimental surgeons, only 4 are reported incompetent. How this fact is ascertained, or what is to be done with those so reported, we are not informed. "Of the volunteer surgeons, seven-eighths are fairly qualified for their duties. The average grade of scientific attainment and practical experience is reasonably high." We are pleased to record such testimony to the abilities of those to whom the lives and health of our noble volunteers are committed, and also to learn that the few incompetent surgeons are those who, by appointment of the governors of the States where the troops were raised, escaped the rigid examination instituted under the direction of the medical department of the army.

But not to pursue our investigation further in this direction, in which we find the Commission giving the results, not so much of their own energy and efficiency, as paying a just and merited tribute to the State and National Governments, and especially to the medical bureau, let us search for something "tangible" as the end of all its herculean labors; and here we find it in all the glory of italics. [The italics are not ours.] "*It has provided for the vaccination of more than twenty thousand men.*" We commend its consideration. It has done a good work. But this is only a small fraction of the great army, and the whole amount of credit due the Commission for performing this tithe of vaccination, is that it has been the almoner of the public charity in this particular, and relieved the medical bureau, always ready and able to perform its whole duty in protecting the army from this dreadful scourge, of a portion of its labors.

But further: During the month of November, besides a large bulk of unclassified articles, it distributed 34,480 articles of clothing from the Washington depot alone. These were issued to 136 hospitals, giving each an average of a little more than 200. About 1000 articles are now distributed daily from the same depot, and their value is not less than $500. At the Cleveland depot 69,000 articles have been received since its organization, and 51,000 distributed. Several tons of hospital diet have also been issued at that point. At Wheeling 4814 articles of bedding and clothing have been issued to the army by the agents of the Commission, the whole amounting to the sum of $40,000. What it has cost to distribute these various articles, the Commission does not enlighten us. Through the agency of the government it would have cost comparatively nothing.

Further still: The Commission have received in cash, up to the 25th of November, $28,100, and on the 20th of November their disbursements had been:—

Traveling expenses of inspection	$2,079 00
Compensation of services for inspection	3,480 36
Traveling expenses of commissioners	1,640 13
Office expenses, including services	1,036 24
Printing and stationery	1,823 95
Postage	397 19
Telegrams	90 29
Freight	888 66
Soldier's Home at Washington	1,195 00
General Hospital	2,392 74
Regimental Hospital	572 59
Storehouse expenses at Washington	660 83
	$16,256 98

Now it should be borne in mind that every dollar of this fund was the offering of humanity and benevolence for the benefit of the sick and wounded soldier in the camp and hospital, and every dollar thus contributed, it was carefully estimated, "honestly and judiciously expended in sanitary measures, will save at least *one soldier's* life." This was the potent wand to conjure with. This "*one soldier's life*" drew forth the sympathies and dollars of the people into the treasury of the Sanitary Commission. This—its holy mission—gave unwonted power to its appeals, and crowded its depositories with everything which the outgushings of affection or patri-

otism could offer. And yet little more than one-eighth of the money contributed has been expended for the direct benefit of the poor soldier. The remainder has been paid for salaries and expenses of the Commission, and its expenses are now graduated to the scale of $5000 per month, or $60,000 per year. The Commission thus, whose humane and patriotic "labors will be its own reward," and who "freely give their time, experience, and labor to the country," first of all appropriate to themselves a liberal salary from the donations of charity, and allow the soldier but a pittance of what was dedicated to his comfort and welfare.

Such are some of the results of this loudly-trumpeted Sanitary Commission. By its industrious painstaking it has accumulated a large mass of statistics and facts, some of which will be quite important to the antiquarian of future ages, others of which have little or no connection with sanitary science, and a few of which are valuable. In all we find strong and conclusive evidence, not so much of its own efficiency in initiating and carrying into operation sanitary measures for the well-being of the vast army now in the field, as of the energy and industry of both State and National Governments, and of the medical bureau. Without the well-regulated, properly-balanced, and *complete* machinery of the latter, the labors of the Commission would have been only as a drop to the mighty ocean. And yet, if we rightly read the reports which have come to our knowledge, the Commission would fain displace the machinery which, for more than twoscore years, has accommodated its capacity and dimensions fully to the demands of the army, and of the government, to make a cozy nest for some of its own adherents; or, to speak without figure, it has come in collision with the regularly constituted medical authorities of the government, and itself created the necessity for the step which was foreshadowed in its organization, that "it will disband should experience render its operations embarrassing to the government, or less necessary and useful than it is now supposed they will prove."

Ventilation with Pure Air.—A writer in the *Lancet* suggests that hospital and other buildings might be ventilated by bringing air in underground pipes from some healthy district in the country, or from the seashore. Water is thus brought into cities, and it would seem that air might with greater facility and less expense be thus conducted.

EDITORIAL NOTES AND COMMENTS.

Quinine as a Prophylactic in the Army.—The following remarks, from the *Chicago Medical Journal*, are on a subject which is at this time attracting much attention. We cannot believe that the dosing of every soldier in the army with quinine has been seriously urged or contemplated. The period of the existence of malarial emanations is not long, and no one would think of continuing to give quinine as a prophylactic to soldiers at the present time, while marching over a frozen soil.

The dosing with quinine in a portion of the army has been very extensive, and in some regiments so universal that the surgeon's-call has been named "*the quinine.*"

"Let us look at the matter in an economical point of view at the outset. Of the army of five hundred regiments, it is a moderate estimate that one-half will, if the war continues, be removed into the realms of Dixie and malaria, so that the prophylactic will be in daily requisition. Five grains to each person connected with a regiment, not including camp-followers, teamsters, etc., will involve the use of (in round numbers) ten ounces of quinine, or more exactly, about eleven of the ordinary ounce bottles, or for the two hundred and fifty regiments requiring its use, two thousand seven hundred and fifty bottles *per diem!* But discard seven hundred and fifty bottles for failures in exhibition, hospital patients, recusants, spiritualists, homœopathists, etc., and there still remains a net two thousand bottles of quinine, with all its well-known imperfections on its head, to be purchased by the government to be forced down the throats of our brave soldiery, *nolens volens.* And this to be continued eight or at least six months in the year—say three hundred and sixty thousand bottles. At the necessarily enhanced price of the article, the cost to the government would fall little short of a million of dollars. Such an expenditure is not lightly to be made, to say the least of it.

"It is scarcely more than a dozen or fifteen years since the doctrine was largely entertained in the malarious regions of the West, that malaria penetrated and pervaded all things as a subtle poison; that it was held in solution in the water, suspended in the atmosphere, lurked in the finest roast of meat, and laid in ambush in the wholesomest-looking loaf. All constitutions were impressed by it, and all diseases modified by it. To this wholesale assumption another was brought as a fellow, that quina is the antidote to malaria wherever concealed and however manifesting its noxious influence. The practical result was that all the adults took quina with their morning coffee, and the children with their bread and milk. History records its immense consumption and consequent enormous price. The writer has taken it

daily for months in succession, with frequent recurring chills notwithstanding, until thirty grains became the ordinary and necessary anti-periodic dose. Scores and hundreds of Western practitioners have seen its eventual failure as a prophylactic, and the rapid tolerance established. Quina is still largely and generally used, but with discrimination and judgment, and not under the guidance of the malarial and antidotal dogma. The rule now is quina for the emergency—the paroxysmal development—other tonics and regimen for prophylaxis. The best of all prophylactics is good health, to be maintained by appropriate hygienic measures. So long as good health is present, there is little danger of attack by any of the multiform varieties of so-called malarious disease. But let the causes of debility operate, and during the hours of depression the ague and its congeners are potent for evil. Comfortable clothing, dry feet, regular and sufficient sleep under shelter, good digestible food regularly eaten, a pint of good coffee both before and after standing guard; judicious medical attention to the condition of the digestive organs, and to occasional diseases,—these and similar obvious methods will prevent more outbreaks of malarious disorder than any mere medical prophylactic. Does not the medical profession yet see that the larger portion of its duty is not exhausted in inventing new drugs, or the revival of obsolete methods of exhibition of old medicines?"

Maine Insane Hospital.—From the report of Dr. Henry M. Harlow, the Superintendent of this Institution, we learn that the number of patients in the hospital, November 30, 1860, was 240; 131 males and 109 females. Admitted during the year, 135; 77 males and 58 females. Total number under treatment, 375; 208 males and 167 females. Discharged during the year, 123; 74 males and 49 females, leaving in the hospital at the close of the year, 252. Of those discharged, 55, or about 25 per cent., were recovered; 25, or 10 per cent., improved; 16, or about 8 per cent., unimproved; died, 27.

Since the opening of the hospital, in October, 1840, 2398 have been admitted. Of these, 2146 have been discharged; 989 recovered; 416 improved; 416 unimproved; died, 325.

The superintendent, in his able report, says: "The demand for increased accommodations for this class of our unfortunate citizens has not in the least degree diminished by the lapse of time. On the other hand, the want becomes more and more pressing every year." During the year, some thirty applicants have been refused admission to the hospital for want of room. A new mode of artificial ventilation has been introduced, together with a more efficient plan for thoroughly warming the building. A farm, consisting of 220 acres of land, is attached to the hospital, on which considerable of the labor is performed by the patients, thus affording them a most healthful exercise and a powerful auxiliary in promoting their recovery. The female patients are employed in-doors, in the manufacture of useful articles. Religious services are attended every Sabbath in the chapel, and those patients who have a taste for reading, have access to a large and well selected library of 2000 volumes, and also the standard literary periodicals of the day, and newspapers of the State. The superintendent remarks:—

"No disease which infests man during his earthly sojourn is so mysterious, so far beneath the ken of finite research, as that of insanity. All we can know of it is from its signs or manifestations. We can observe its varied types and manifold shadows as they flash from the glaring eye or flit across the face, or dash in the wild gesticulation through the air. We can hear the painful sound of the voice as it falls in sad and solemn cadence, or rises with incoherent thought, uttering joy ecstatic, or bursting with the wildest fury of passion. We can see and hear all this; but we know nothing of the hidden springs within, which give rise to such phenomena. We can examine the body and note all physical signs which present themselves, and, after death, with the aid of the scalpel and microscope, we can visit the deep, dark chambers of the brain, where has 'lulled many a hidden thought,' but nothing there remains save deserted halls and a net-work of machinery—no soul is there to set the wheels in motion and explain the wonder-working mystery.

"This much, however, appears obvious—that so intimately connected and interwoven with each other are our mental and physical organism, that whatever affects the one is immediately felt by the other. Says an English writer on this point, 'the mind and the body, like two musical instruments contiguous to each other, are so constituted that if a chord in the one be touched, its vibrations are instantly felt or reciprocated in the other.'"

Salting Railway Tracks.—This question is just now brought prominently before the public in this city and in New York, by the proposition to prohibit the practice entirely. The practice originated in the idea of economy in expense, it being alleged that the railway track can be kept in a condition for the passage of the cars at much less expense and with vastly less hinderance to travel, than by the slow and tedious process of carting the snow away. On the other hand, it is

claimed that the presence of so much salt in our thoroughfares tends to produce disease, especially diphtheria and kindred diseases. It is only in this aspect of the case that it comes within our notice as medical journalists. In Select Council, the subject was referred to a committee, before whom testimony has been taken pro and con, with a view to enable them to arrive at a correct decision in the premises. The statements of Professor Rogers, of the University of Pennsylvania, are as follows:—

"He said that common salt was not a volatile substance. It would have a salubrious effect on the streets and the atmosphere, rather than otherwise. Salt and snow were apt to cool the air and render it more dry by condensing it and absorbing gases. A large amount of fluid matter might lie in the streets, through a mixture of salt and snow, but more moisture would not necessarily exist in the atmosphere, although salt and snow are colder than snow alone. The temperature of snow is 32°. Salt and snow are more fluid than snow would be when softening, but the fluid is not, in the least degree, more penetrating. Salt and snow, when melted, does not freeze again, whereas the latter, in an unmixed state, does. If we walk in water formed by salt and snow, there is no more chance of catching cold than by walking in pure water. Moisture from salt and snow is not likely to be retained longer than the moisture from snow itself. A person's feet would remain moist a longer time, after being wet with snow water, than with the water of snow and salt, although the slush of the latter is colder. He did not think vegetable colors would be changed in a greater degree by an admixture of salt, than by pure water alone; it is perfectly neutral. The professor was not positive whether it would affect leather more than mere snow water. He decidedly recommended melting snow by salt, and thus rapidly banishing its damp and penetrating vapor from the atmosphere. He considered that its effect on the feet of horses was not injurious, and that it was far better for them to travel through salt and snow for a short time, than through snow slush for a longer period."

Dr. Malone concurred entirely with Professor Rogers, and considered that "salting the streets was rather a healthful advantage than otherwise, inasmuch as it shortened the time of bad walking and damp atmosphere."

Mr. Whitall, a school teacher, stated that, "from his experience, feet would dry slower after being wet with salt and snow, than with snow and water alone." He is a teacher of twenty years' standing, and "finds that children now complain more of cold feet in school than before salt was used in the streets." Still he could give no statistics to confirm his opinion, arguing "much from his own constitutional peculiarity." Others testified as to the health of employees on the roads, not one of whom had had diphtheria, although occupied sixteen hours in every twenty-four, on the road.

At the adjourned meeting of the committee on Friday, Professor Rogers said:—

"That he had made an estimate of the amount of salt in the street slush. In no case did it come up to that of sea water.

"Thus, the slush is a brine not half as strong as sea water. The temperature of the snow during the melting is reduced five degrees; afterward the water obeys the laws regulating any other water, and becomes warm.

"If you put a large quantity of salt in the water, you cannot freeze it at zero. The salt slush, accordingly, continues to run off into the sewers all night.

"I should have mentioned the other day that salt water will not rot leather as quickly as fresh water. If you take a very strong solution of salt you cannot wet a piece of leather with it at all."

Professor Rand, of the High School, "did not think the health of any one was affected by the sprinkling of salt upon the streets." He concurred in the main with the views of Professor Rogers, as did also Dr. Kenderdine and Mr. Essinwin. To the same purport is a letter of Dr. Agnew to the committee, and one from Dr. P. B. Goddard. The expression of professional opinion is therefore thus far very decidedly in favor of the salt. Further testimony is to be taken next week on the subject.

In New York City the ordinance against salting railway tracks has become a law, we judge without very thorough investigation.

Sanitary Legislation at Albany.—Our readers are aware that for several years past attempts have been made to provide the City of New York with an efficient medical sanitary police. A bill has been presented at each session of the legislature for several years, which was carefully drawn, and calculated to meet the sanitary wants of that great metropolis. It had the support, too, of the chief moneyed interests of New York, including the Life Insurance Companies and the principal mercantile houses, as well as that of the medical profession of the city and State.

But the bill had unscrupulous opponents among politicians and placemen, who left no means untried to defeat it, in which they succeeded. *How* it was accomplished seems to be revealed in the following passage, which we clip from the pub-

lished proceedings of a recent meeting of the New York Board of Aldermen. We trust that the legislature now in session will give the subject the consideration its merits deserve, and that its members will at least not lay themselves open to the charge of bribery and corruption. We learn that the charge is to be made a subject of inquiry by the present legislature.

"The annual report of the City Inspector was received.

"Alderman Boole moved that 5000 copies be printed.

"Alderman Brady thought that 1000 copies were enough. There was no use printing a large number to kill the Health bill in the legislature. They had killed it three years by hard dollars, and that was where they beat the doctors. *He knew the legislature could be bought. That was what they got the bills up for. He had been up to Albany last year and bought up the legislature.*

"A voice—How much did it cost?

"Mr. Brady—Well, sir, I took up $6000, and slept on it between two beds, at the Delavan House. I had to come down to get $2000 more. But they may pass whatever bills they like; we won't interfere with them."

Newark, New Jersey, Dispensary.—This enterprise was organized in December, 1857, its object being "medical charity, and the gratuitous furnishing of medical advice and medicines to the poor of the city." The whole matter is under the control of the most skillful physicians of the city, and the dispensary is open every day, (Sundays excepted.) The work is divided into male, female, and vaccine departments, with physicians regularly allotted to each. The dispensary is designed only for the relief of such persons as are able to apply personally, for treatment. Those who are unable to walk out, come under the care of district physicians. A hospital department is also connected with the dispensary, furnished with beds and other necessaries. Over 5000 patients have already been treated since its organization, and over 24,000 prescriptions dispensed. We are pleased to notice the establishment of an institution of this kind in a neighboring city, because it adds another to the many instances in which the profession of medicine, in a quiet and unostentatious manner, is contributing its full share to the alleviation of the ills of humanity.

But is it not time that the City of Newark, which contains a population of over 60,000, had a hospital building and a fully organized hospital? The Medical Association of Newark, and the Medical Society for the County of Essex, are both efficient organizations, and include some of the best physicians and surgeons in the State in their membership. Newark certainly *needs* a hospital, and has able men to fill the medical and surgical appointments of one. Why should there not be a hospital of 250 beds in Newark? We commend the subject to the consideration of the profession of that city, and of the city and county medical societies.

Hospitals at Alexandria.—There are three hospitals at Alexandria in active operation: the Mansion House, Fairfax Street, and Washington Street. Two new buildings are soon to be opened for the same purposes; Dr. J. B. Porter, of the United States Army, is the surgeon in charge. His staff consists of Drs. Robert K. Smith, Thomas P. Gibbons, J. Bernard Brinton, and Mitchell H. Picot, of Philadelphia. There are 700 patients in these hospitals. The medical department proper, it is said, is most admirably administered. The surgeons are accomplished and able. The patients are carefully and promptly attended. The ward rooms are clean and comfortable, well warmed and ventilated; the diet for the sick is wholesome, generally well cooked, and such as is most suited to the sick and convalescent. Female nurses are employed in these hospitals, but seem, for some cause, not to give satisfaction, their presence serving to irritate and annoy the patients.

The Mansion House contains beds for 516. The Fairfax Street, for 110; and is under the professional care of Dr. Robertson, of Cumberland, Pennsylvania, who manages it alone, superintending every department and performing the duties of steward, apothecary, and clerk. The Washington Street hospital is under the care of two brothers, Doctors Thompson, of Pennsylvania, and is well conducted. Many of the surgical cases are treated here.

These hospitals are all under the direction of the medical bureau of the army, and evince the industry, energy, efficiency and entire success with which that department, *as at present constituted*, is conducted.

Professional Pleasantries.—Dr. Bauer, of Brooklyn, New York, whose very valuable Lectures on Orthopædic Surgery are now being published in the Reporter, and whose clinical studies and instruction in this branch of surgery have rendered him distinguished as an orthopædic

surgeon, made a flying visit to our city during the last week. He was most cordially received and entertained, and made the acquaintance of several of the professors in our colleges. At Professor Pancoast's Clinic on Wednesday, Dr. Bauer was introduced to the class and was cordially greeted. It so happened that several cases of *talipes*, both for operation and for exhibition of progress in cure, were presented before the class, giving Professor Pancoast an admirable opportunity of vindicating the utility and practicability of his favorite operation for the radical cure of that deformity. The operation, which consists in dividing the soleus muscle at its insertion, instead of the tendo achilles, was performed in several successive cases, exhibiting different varieties of the deformity, and with such complete success as to elicit the warm commendations of Doctor Bauer, who saw the operation now for the first time, and who, after carefully manipulating the limbs both before and subsequent to the operation, expressed himself to the class as entirely satisfied that the *utile cum dulce* were appropriately mingled in it.

Correspondence.

DOMESTIC CORRESPONDENCE.

Messrs. Editors:—I have been particularly gratified by your article on the "*Sanitary Commission.*" You have spoken my views of it better than I could have done it myself. It is one of the most *anomalous* births of the present time, an insult to the medical profession, and a collection of heterogeneous materials.

No class of men have performed so much gratuitous labor for the health of the community as physicians, and here is a "Commission" made up of clergymen and laymen, with a spice of physicians, to do—what? Just what the noble army-staff of medical men are appointed and expected to do; and, as you say well, from aught that appears to the contrary, have ever done.

I have been waiting, and wondering that the journals have not spoken out before upon this subject, and I thank you that you have not only spoken once, but promise to speak again. Let us have it. Let the clergyman stick to his pulpit, the laymen to his appropriate calling, and the medical man to his profession of promoting the health of all. C.

ARMY CORRESPONDENCE.

We glean the following from late correspondence. A member of the 69th P. V., under date of January 12, writes:—

"Our camp *was* a cornfield belonging to a 'very quiet secessionist.' We have had bad weather for some days past, and our camp ground has been a perfect mud hole. This morning, however, the sun shone brightly and the walking was passable. Three companies are away at Conrad's Ferry, two on picket duty, and the others engaged in building a fort near the place where the Ball's Bluff disaster occurred. We have been in reception of Sibley tents some time past. The men are much pleased with them, because they are comfortable. When lighted up, they present a very picturesque appearance. Our men are well satisfied with the staff and company officers. We are supplied with plenty of good rations, especially bread, which is baked in camp. The health of the regiment is remarkable. We have not had in the hospital more than eight, on an average, since we left Philadelphia, and but two deaths—one that of an *old man*, and the other one who contracted disease before joining the regiment. The medical department is ably filled by Drs. Bondaught and McNeil, of Philadelphia. Our hospital accommodations are but meager, having nothing in our possession capable of comforting the sick. During the week that has passed we have received from some kind association blankets, pillows, quilts, stockings, and some jellies. Miss Dix paid us a flying visit to-day, complimented us on the health of our camp, and promised that she would remember us when she arrived in Washington."

A letter from the 71st says:—

"The health of the regiment is generally good, there being only from fifteen to twenty men in hospital, and about a dozen in quarters.

"There is a fine hospital now in process of erection, under the direction of Lieutenant C. White, of Company H.

"The hospital will be finished in the course of a week or ten days, and the sick removed from their present poor quarters.

"I should not forget to mention two large ovens that were also built by Lieutenant White, and from which the men daily obtain sweet, fresh bread.

"The regiment is gradually recovering from the shock it received at Ball's Bluff, and are fast regaining their perfection in drill and discipline."

Mr. Gillette, a member of the New York 71st, who was taken prisoner at Bull Run, and who was among the company released by exchange a few days since, says:—

"The prisons and hospitals in Richmond are six in number, and are large tobacco warehouses, three of which are for the former purpose and three for the latter. One of these buildings is used for suspected Unionists, two others for hospitals, and the other three as general prisons. The prisoners are confined to the number of 100 on a floor, 60 by 40, and are allowed no exercise, not even in the yards. It

was not until late in the month of November that they received straw to lie upon. Their rations consisted of two meals a day. In the morning, half a loaf of bread, weighing 4 ounces, and a piece of beef weighing 3 to 4 ounces, and that not of the best quality. In the evening the same allowance of bread, and about a pint of soup, which was the broth in which the morning's rations were boiled, and a few vegetables. When they first arrived in Richmond, things were in such a confused state, that sometimes eighteen hours, and once twenty-four hours, elapsed before they had anything to eat.

"Subsequently a Prison Commissary's Departmnet was established, and matters became more systematized. The prisons in Richmond are the most wretched of those through the South. A large one is now being built at Saulsbury, North Carolina, for the accommodation of all Federal prisoners on hand, or who may be taken. The space inclosed is fifteen acres, and when finished they will be better cared for. The Bull Run men are suffering greatly from the want of clothing. As the day was warm, they threw their coats and waistcoats away, and the remainder being much worn, it is not an uncommon sight to see them screening themselves from lookers-on from the lack of sufficient covering to insure decency. They have received no clothing, with exception of the few that are from Rhode Island, Massachusetts, and Indiana."

A letter from the 37th Indiana Regiment, of which Dr. William Anderson, of Ripley, is Surgeon, and Dr. J. R. Goodwin, from Franklin, is Assistant-Surgeon, says:—

"Since leaving our place of rendezvous, at Laurenceburg, on the eighteenth of October, the regiment has been severely afflicted with disease. First the measles visited us, of which we had 133 cases and one death. Others, however, died with the sequelæ of measles. The deaths in all have been about thirty."

NEWS AND MISCELLANY.

Wills' Hospital for the Indigent Blind and Lame.—The Twenty-seventh Annual Report of this Institution has just been submitted to the councils. The following is an abstract of it:—

"The expenses during the past year amounted to $5537 04, expended as follows:—

House expenses	$2944 05
Salaries and wages	1273 01
Medical department	317 21
Real estate	902 77
Number of patients admitted during the year 1861.	213
Number under treatment on first month first, 1861.	19
Whole number in the hospital during the year	232
Number of discharges	209
Number remaining at present in the house	23

"Of those discharged there were—Cured, 136; improved, 52; incurable, 17; eloped, 4. Total, 209.

"Of those admitted, there were born in the United States, 90; Ireland, 90; England, 15; Germany, 12; Wales, 2; France, 2; Canada, 1; Scotland, 1. Total, 213.

"At the clinic, held semi-weekly, there have been treated by the surgeons on duty—New patients, 1681; whole number treated, 2532.

"From patients and other sources, during the year, $558 89 was received, and the same was duly paid to the city treasurer by the steward of the hospital.

"There were 298 surgical operations performed by the surgeons of the hospital during the past year, of which 124 were upon house patients, and 174 upon out-door patients at the clinic. The principal operations were—For cataract, 38; strabismus, 32; foreign bodies, 36; entropion, 20; pterygium, 14; dilatation lachrymal duct, 47; artificial pupil, 10. Total, 217. The remaining operations were of minor importance."

Dr. Lewis Condict.—We are sorry to learn, from the newspapers, of the serious illness of this Nestor of the medical profession. Dr. Condict resides in Morristown, New Jersey, and his present illness is the result of a fall, fracturing the thigh-bone within the capsular ligament of the hip-joint, as we understand.

Dr. Condict graduated from the medical department of the University of Pennsylvania, in 1794, being, with Dr. John Redman Coxe, of this city, who graduated at the same time, the oldest graduates of that venerable school, and probably the oldest of any medical school in this country.

Dr. Gurdon Buck has resigned the post of Surgeon to the New York Eye Infirmary, and Dr. F. J. Bumstead, late Assistant-Surgeon, has been appointed to fill the vacancy.

Division Hospital.—Major Church, Division Surgeon of Gen. Burnside's Expedition, has established very excellent accommodations for the sick and wounded. The schooner Recruit, one of the best vessels in the fleet, is fitted up with 440 berths on two decks in her hold, and furnished with every appliance necessary to the care and comfort of the disabled. The division hospital ship is in charge of Dr. Samuel A. Green, assisted by Dr. Theron Temple and Dr. Dodge.

A Hint to the Pharmacopœia Committee.—A writer in the *Lancet* suggests that the old signs for the ounce, drachm, etc., should be abolished on account of their similarity and liability to produce mistakes.

The best suggestion that we have seen to prevent errors in quantities, is to write out the word, as ounce, grain, etc., in full.

The Massachusetts Medical College. — The *Boston Medical Journal* says "that the class of this institution this session numbers two hundred and four."

Manufactured Cream.—The *British Medical Journal* says "that cheap cream is sold in Liverpool which is made of arrow-root and milk."

A Useful Invention.—To the business man a copying-press is invaluable and indispensable. It is but a few years since any other method was devised for copying correspondence than the slow and tedious process of doing it by hand. Then the idea of using a thin paper, with pencil or ink prepared for the purpose, was introduced, and two letters could thereby be written at the same time. In a little time Yankee invention overcame this obstacle, and by means of a press constructed upon the general principle of a printing-press, the process was found by which, in a moment, an exact impression of the original letter could be transferred to paper and made permanent. The first presses used were exceedingly clumsy and unwieldy. It was soon ascertained that no *great* force was necessary to accomplish the desired end, and the heavy iron structures gave place to lighter and more artistic fabrics.

And now we record the last, most simple, and portable of all, the "Atwater's Copying-Press, with Writing Case," which, for a trifling expense, can be sent by mail to any part of the country. And it accomplishes all that any press can accomplish. It makes a complete and perfect copy of the original letter; can be carried, with all the fixtures for writing and copying, in the coat-pocket. The invention is, therefore, an exceedingly useful one to physicians and surgeons who desire to preserve copies of their prescriptions or advice by letter. A few seconds with this press will save them much time and labor. Full directions accompany each press, so that any one can readily use it. Address Atwater, Providence, Rhode Island.

MARRIED.

Barden—Parkin.—On Jan. 2, by the Rev. M. D. C. Crawford, Wm. U. Barden, M.D., of Mansfield, Tioga County, Pa., to Elizabeth B., eldest daughter of Mr. Josiah Parkin, of this city.

Rowe—Bessac.—In Manchester, Nov. 26, by the Rev. William Donnelly, Mr. Charles Rowe, of Sharon, to Miss Philena A., daughter of Dr. W. H. Bessac, of Manchester, Mich.

Lippincott—Stackhouse.—By Friends' Ceremony, at Fallsington, Bucks County, on the 2d inst., Allen Lippincott, M.D., to Tacie E., daughter of Robert Stackhouse, both of Fallsington.

DIED.

Tucker.—Dr. Herman Tucker, of Sandgate, died suddenly on the 6th inst., from mortification, resulting from a sliver which had entered his finger. He was 76 years of age, and had practiced medicine for fifty years.

Answers to Correspondents.

Correct vs. *Common Names.*—A correspondent inquires whether iodide of potassium, a term often used in the Reporter, means the same as hydriodate of potassa? or rather, whether "those who write for the Reporter, including the editors, write *iodide* when they should write *hydriodate?*" These questions would indicate that the querist, though he may be a very good physician, is certainly no chemist. The composition of the salt in question is one equivalent of iodine and one of the metal potassium; it contains neither potassa nor hydriodic acid. If, however, we decompose it with any acid, except nitric, we produce this alkali and acid as a result of the reaction, because, water being decomposed, its hydrogen goes to the iodine to produce hydriodic acid, while its oxygen combines with the potassium to form potassa. To this circumstance we may attribute the misnomer which originated in an imperfect knowledge of the salt, and has not yet been entirely forgotten, disfiguring the medical literature and prescriptions even of our time.

The U. S. Pharmacopœia, an authoritative work, now undergoing its fifth decennial revision by a committee of physicians and pharmaceutists appointed by the delegates of chartered medical and pharmaceutical colleges, convened in Washington May, 1860, has for thirty years recognized this salt as officinal under the name we have habitually applied to it, its simple, correct, and accurate name, the only name, it appears to us, that should be used in speaking of it.

Dr. J. K., Iowa.—Monsel's salt is a subsulphate of peroxide of iron. When ordinary sulphate of iron is boiled with nitric acid and a little sulphuric acid, it becomes a sulphate of peroxide of iron. This would be rather irritating or even corrosive to apply to a bleeding surface; but Monsel proposed to give it a *basic* character by increasing the proportion of peroxide of iron it contains, the peroxide being in solution in, or mixed with, the persulphate. As this salt is so very soluble and is deliquescent, it is better to use it in the form of a dense solution than in that of powder. There seems no reason to deny its great superiority as a hæmostatic to the other salts of iron.

Vital Statistics.

Of Philadelphia, for the week ending Jan. 18, 1862:

Deaths—Males, 143; females, 131; boys, 75; girls, 74. Total, 274. Adults, 125; children, 149. Under two years of age, 81. Natives, 202; Foreign, 52. People of color, 13.

Among the causes of death, we notice—Apoplexy, 5; convulsions, 10; croup, 9; cholera infantum, 0; cholera morbus, 0; consumption, 31; diphtheria, 6; diarrhœa and dysentery, 3; dropsy of head, 3; debility, 21; scarlet fever, 23; typhus and typhoid fever, 8; inflammation of brain, 3; of bowels, 6; of lungs, 22; bronchitis, 1; congestion of brain, 7; of lungs, 3; erysipelas, 0; hooping-cough, 0; marasmus, 7; small-pox, 12.

For week ending January 19, 1861.....258
" " January 18, 1862.....274

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 2073.

Of New York, for the week ending Jan. 20, 1862:

Deaths—Males, 234; females, 179; boys, 114; girls, 105. Total, 413. Adults, 168; children, 245. Under two years of age, 110. Natives, 213; Foreign, 119; Colored, 1.

Among the causes of death, we notice—Apoplexy, 0; infantile convulsions, 29; croup, 15; diphtheria, 6; scarlet fever, 37; typhus and typhoid fevers, 10; cholera infantum, 0; cholera morbus, 0; consumption, 52; small-pox, 18; dropsy of head, 15; infantile marasmus, 12; diarrhœa and dysentery, 0; inflammation of brain, 0; of bowels, 0; of lungs, 23; bronchitis, 15; congestion of brain, 0; of lungs, 0; erysipelas, 0; hooping-cough, 0; measles, 0: 175 deaths occurred from acute disease, and 29 from violent causes.

Population of New York, 814,277. Mortality, 1 in 1729·4.

Of Newark, N. J., for the year 1861:

Deaths—Adults, 615; children, 1178. Total, 1793. Under two years of age, 1016.

Among the causes of death, we notice—Consumption, 267; convulsions, 262; cholera infantum, 132; inflammation of the lungs, 107; scarlet fever, 70; marasmus, 91; dropsy in the head, 60; croup, 35; debility, 50; diphtheria, 23; diarrhœa, 27; congestion of the brain, 33; typhoid fever, 30; drowned, 12; burns and scalds, 12; apoplexy, 31; delirium tremens, 4; small-pox, 17; hydrophobia, 1; heart disease, 17; exhaustion, 27; dysentery, 19.

Average of deaths for the year, about 1 to every 40 inhabitants.

Of Providence, R. I., for the year 1861.

Deaths—Males, 507; females, 544. Total, 1051. Under two years of age, 367. Natives, 843; Foreign, 208; Colored, 63.

Among the causes of death, we notice—Consumption, 184; convulsions, 39; cholera infantum, 61; inflammation of lungs, 65; of brain, 18; scarlet fever, 28; marasmus, 28; croup, 24; debility, 23; diphtheria, 22; diarrhœa, 22; dysentery, 32; fevers, 23; heart disease, 41; hooping-cough, 25.

Population of Providence in 1860, 50,666. Deaths, 1 in 48·2.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, Nos. 276, 277. | PHILA., FEBRUARY 1, 8, 1862. | New Series, Vol. VII. Nos. 18, 19.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By Louis Bauer, M.D., M R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

3. *Talipes Valgus, or Flat-foot.*

The latter term has been given to this deformity on account of the breaking down of the plantar arch, and the more or less complete flattening of the plantar surface which comes in contact with the floor at almost every point. In the higher grades of paralytic valgus, the foot may be turned on its longitudinal axis so much as to convert the internal margin into the sole, Fig. 12.

Fig. 12.

Valgus is the most frequent deformity of the foot, from the fact that, irrespective of the other morbid causes, it is evidently the inheritance of the African race. It is indeed so common among negroes as to constitute the normal type. Sometimes it is associated with knock-knee. Next to the negroes, valgus is very often met with among the Jews, more particularly in those countries where their race is preserved by the legal prohibition of intermarriage with Christians.

Besides this hereditary origin, we observe this deformity as a frequent result of diseases of the spinal cord, or, as it sometimes appears, from an exclusive paralysis of the tibial nerve.

A small, fractional part of the cases of valgus is to be attributed to inflammation of the ankle-joint. If not mistaken, we were the first who called attention to the fact that morbid reflexion was the proximate cause of that symptom.

Anatomically speaking, valgus exhibits diminution of the niched arch of the foot. The otherwise receding tibial margin of the same, protrudes to a greater or less degree. In looking down upon flat-foot it seems to be infracted in two directions—first, from upward downward; second, from the external margin toward the internal. The anatomical relations are consequently reversed. The foot is rotated on its longitudinal axis to such an extent as to lower the internal margin and raise the external. In the higher degrees, and in long-established cases, the patient may step upon his tibial margin, and, more especially, upon the protruding scaphoid bone. If there be a great relaxation of the internal lateral ligament, as is usually the case, and the articulation be loose, the astragalus is somewhat turned and inwardly inclined so as to constitute a subluxation. The infraction of the foot seems to be placed between the first and second rows of the tarsal bones. The toes are everted and the external malleolus buries its contours in the external tarsal fossa. As a general thing, the extremity is attenuated and, when paralysis is the cause of the deformity, is arrested in development so as to differ in length with its fellow

To a certain extent, however, the difference must be ascribed to the altered form of the foot itself, which loses in its height from one-quarter to three-quarters of an inch.

We have already indicated the causes of the trouble, and assigned to maladies of the nervous system the greater share. It is indeed remarkable that apparently moderate affections of the brain and spinal cord during dentition should give rise to so serious consequences. In hundreds of cases we have had under our charge, at least 90 per cent. could be traced to the dentitial period, and in the larger proportion the premonitory symptoms were so insignificant as to be entirely disregarded by parents. Sometimes there was but a slight catarrh of the respiratory or alimentary organs; at others, it was preceded by great uneasiness. Many children have been put to bed in an apparently healthy condition, and taken up next morning paralyzed. In a few cases, inflammation of the meninges of the brain or spinal cord had given rise to the paralysis, which was then of a more extensive character, involving either one side of the body, (hemiplegia,) or the lower half, (paraplegia;) and in these cases talipes valgus is but one of the resulting deformities. In paraplegia, depending on direct pressure of the spinal cord by the posterior curvature of the spine, talipes valgus is rarely observed, whereas, we have met with equino valgus in fractures of the spinal column at its lumbar portion.

In all these paralytic or passive forms of valgus we find the tibial nerve, and consequently the adductor muscles of the foot, completely paralyzed, while the peroneal nerve has retained in part or *in toto* its innervation, or it causes a state of reflex contraction. In the former, the abductor muscles are only physiologically contracted, on account of the antagonistic muscular group being disabled; in the latter, reflex action has established a tonic and permanent contraction of the peroneus muscles. The difference between these two forms of active and passive valgus can be easily discerned by substituting the hand for the physiological action of the two tibial muscles. If the foot can be brought in this way into a correct position and held there by mechanical means, you have the passive form of valgus, and *vice versa*.

Talipes valgus, originating in inflammation of the tibio-tarsal and tarsal articulations, is always of an active character, depending invariably on reflex contractions of the peroneus muscles. Not every inflammatory process in those joints necessarily gives rise to this deformity, but when they do, it is invariably valgus. From an extensive field of clinical observation, we have elicited no exception, and never met with a reflex contraction of the tibial or any other muscle of that region. In paralysis, we have incidentally observed reflex contractions of the flexores digitorum.

The lightest forms of talipes valgus are those of a consecutive mechanical character, as in genu-varum; but they are, nevertheless, very troublesome, painful to a high degree, and may even lead to inflammation of the tarsal bones.

The prognosis of valgus is governed by its producing causes. Generally the paralytic forms allow of only a doubtful prognosis. The more complete and extended the palsy, the less the hope of recovery. Progressive improvement of the principal disease, increases the chances in behalf of the valgus. We may amend the distortion and render locomotion more easy by mechanical appliances, but, of course, this does not constitute a cure. Because we cannot restore by these remedies the altered structure and lost tonicity, nor directly invigorate the arrested growth and development. In fact, beyond replacing and keeping the tarsal bones in their respective positions, and supporting the plantar arch, we can do nothing by orthopædic treatment. For these weighty reasons our prognosis should be cautiously given.

It is certainly true that paralytic affections in children, are not of so grave a nature as in adults and in people of more advanced age. Their powers of repair are greater: the skull and spinal column is yet soft or more pliable, and hence spontaneous improvements are frequent. Notwithstanding all this, a perfect recovery from paralytic valgus is one of the rarest occurrences. The more recent a case is, the more early a general and local treatment is resorted to, and the more limited the paralysis, the more favorable, certainly, is the prognosis.

Talipes valgus produced by an inflammation of the tarsal and ankle joints admits of a favorable prognosis, at least in as far as the deformity is concerned, and in general if the inflammatory process has not too deeply involved the interested structures. The division of the peronei muscles and the reposition of the foot act like a charm, and afford more relief than all antiphlogistics

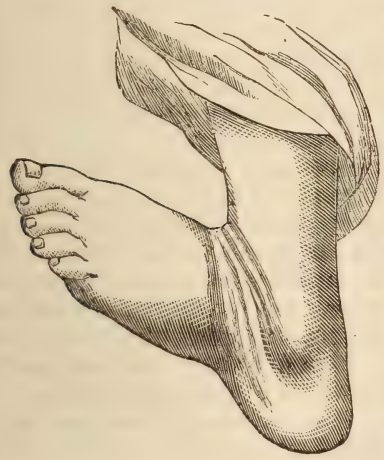
that may be brought to bear upon the diseased structures.

Talipes valgus, dependant on knock-knee, allows an equally favorable prognosis, provided the case is not of too long standing, and the form of the bones not too materially altered.

4. *Talipes calcaneus.*

The term "calcaneus" has been assigned to that rare but very peculiar deformity of the foot in which the os calcis stands on the ground with its posterior extremity, and the foot is extremely bent, the dorsum approximating more or less the tibia, Fig. 13. In the course of our orthopædic

Fig. 13.



practice we have seen but two indisputable cases of talipes calcaneus. One of them was in a boy about eight years old, whom we accidentally met with on one of the New York ferry boats. His deformity was fully as bad as that we have exhibited in the diagram, copied from Gross' work on surgery. Although he did not consent to have a cast taken of the malposition, which deprives us of the opportunity of showing you an exact copy in plaster, we, nevertheless, took ample time to examine his case thoroughly, and are thus enabled to give you an accurate description. This, together with the above diagram, will afford you a clear idea as to the mechanical character of talipes calcaneus, from which you cannot fail to recognize it.

The case under consideration represented the highest degree of flexion the human foot is capable of. The angle between leg and foot would not have exceeded 12°. The toes occupied almost a vertical position, and the posterior part of the heel rested on the floor, and had become covered with thick callous substance. Although the extremity was decidedly shorter than its fellow, from the arrest of growth, yet the protrusion of the heel served as a substitute for the deficiency. The extensor muscles of the foot (gastrocnemius and soleus muscles) were completely paralyzed, their belly soft and undefined, the Achillis tendon flaccid, while the tibialis anticus and peroneus tertius were intensely contracted, so as to raise even the annular ligament. Any attempt to extend the foot met with insurmountable resistance on the part of the contracted muscles, whereby the toes bent back. The plantar arch was *not materially changed*, and, if at all, it was *diminished*.

Evidently the tibia was riding upon the anterior surface of the trochlea of the astragalus, and its superior surface seemed to be continuous with the posterior surface of the tibia. This anatomical relation accounts readily for the great downward protrusion of the heel. The affected extremity presented in every other respect the *usual symptoms* of talipes.

With reference to talipes calcaneus experience is limited. It is, therefore, doubtful whether the majority of cases be congenital or acquired. In our patient it seemed to be of congenital origin, and obviously caused by paralysis of the triceps and contraction of the two principal flexors of the foot. But, to tell you our honest opinion, if we had not known that there was such a thing as talipes calcaneus, we should have felt inclined to pronounce it posterior dislocation of the foot, so much had it that appearance.

At any rate, it cannot escape your notice that talipes calcaneus is the exact reverse malposition of talipes equinus.

Some authors, as for instance Little, have observed combinations between talipes calcaneus and varus and valgus, which are caused by the prevailing contraction of one of the flexors of the foot over the other. Such complications have received the name of calcaneo-varus and calcaneo-valgus.

The same author relates also a case of calcaneus, produced by an extensive scar in front of the ankle from a burn.

From all we have been able to gather about this subject, the prognosis seems to be rather favorable, provided the case be not of too long duration, and the bones themselves have become

malformed. Before leaving the pathology of talipes, we cannot refrain from looking upon a deformity which hitherto has been, and we think very erroneously, considered under the head of talipes calcaneus. From time to time, cases have been presented to our observation that consisted, evidently, in a contraction of the plantar muscles, and, consequently, in an increase of the plantar arch. Sometimes the toes are abnormally flexed or extended. The distorted foot is materially shortened, and, therefore, thicker than the other, the dorsum is proportionately more convex, the heel protrudes somewhat more downward, the ball of the foot is more developed, more especially when the toes are abnormally extended. Otherwise the motor apparatus is in perfect order, and no other muscular contractions manifest themselves.

This species of deformity has consequently nothing in common with talipes calcaneus, in either its pathology, causation, or treatment, and from its frequency deserves a place by itself.

We propose the term of *talipes simplex* or *plantaris* merely to discriminate it from the other forms of talipes.

As to its cause, we are inclined to ascribe it to the wearing of short boots. Among the Chinese women this is at any rate the prevailing cause, and that deformity is therefore very frequent among them. Whether an early inflammatory affection of the tarsal bones or their periosteum gives rise to talipes simplex, we do not venture to determine.

The prognosis of these deformities is governed by the same considerations we have already mentioned, and we need not repeat them on this occasion.

In fine, we desire to allude to a malposition of the great toe, which gives rise not only to a disfigurement of the foot, but constitutes the source of great inconvenience in locomotion. The toe is mainly outwardly inclined, and forms, with the head of the first metatarsal bone, an obtuse angle. From the metatarso-digital joint all parts recede, leaving a considerable protrusion which is soon covered with callosity, which, being exposed to pressure and friction, inflames and becomes tender. Occasionally abscesses form under the callosity, and thus seriously impede locomotion.

It seems that pressure from too narrow boots is the only cause; but in time, both flexor and extensor become shortened and require division, besides the mechanical appliances. The prognosis is invariably favorable.

Treatment of Talipes.

Gentlemen:—In our discussion on the prognosis of talipes, we have enumerated the chief points of difficulty in the way of its perfect relief. If you have attentively followed us, you must have become aware that the treatment of talipes is by no means as trifling as some surgeons make it appear. The steady advancement of surgical art has greatly facilitated our success; yet we meet with morbid conditions in the deformities of the feet, over which we can exercise but an indirect therapeutical influence. And for that reason, we should enter upon the treatment of those afflictions with correct views of their intricacy. Do not overestimate your ability, neither shrink from difficulties which perseverance and skillful management may overcome. Bear in mind that the division of contracted muscles is but *one of the remedies* we have to employ in the treatment of talipes, and which alone but rarely suffices. The operation of tenotomy most certainly is a great aid, but the after-treatment is equally important. In taking charge of a case of talipes, we should be unremitting in attention, and never leave to unskilled hands the mechanical adjustment of apparatus. In making rational use of all auxiliaries placed at our disposal, we serve both our patient and ourselves, and stand above blame in case of failure. For this appeal to your honor and duty, we have derived a good pretext from our experience. We have observed that poor sufferers, after having been skillfully operated on by eminent surgeons, were turned over to unskilled students for after-treatment. The cases naturally not only failed, but the failure greatly contributed to their aggravation and incurability. There is no reason why students should not enjoy the privilege of witnessing operations of this kind, and benefit by observing the mode of after-treatment. The latter requires, however, a well-trained hand, and we would rather assign the operation to a student than the after-treatment.

The general treatment of talipes resolves itself into the following indications:—

1st. The removal of muscular impediment.

2d. The reposition of the tarsal bones in their normal location.

3d. The re-establishment of the motor power.

4th. The promotion of nutrition, growth, and development of the affected extremity.

In young subjects, muscular contraction constitutes the *chief cause* of most cases of talipes;

their division is, therefore, *the chief and sufficient remedy* for the re-establishment of form and position of the foot. All that remains to be done besides tenotomy, is to keep the newly-acquired position by appropriate appliances.

If the bones of the tarsus are malformed, as is usually the case in patients of some age, who have employed their affected extremity in locomotion, the second indication presents itself as the next object of treatment. The means of replacing the tarsal bones are the hand and mechanical appliances. The former is of great service. Without causing any painful pressure or contusion, the great power of the hand can be concentrated at any place where it is needed, and the more assiduously it is employed the more rapidly the bones will yield. *There is no mechanical apparatus, however ingeniously constructed, that could be substituted for the hand in the mechanical treatment of talipes with an approximate degree of efficacy.* In fact, could we without interruption employ the hand as a mechanical agent, we would relieve most obstinate forms of talipes which too frequently withstand mechanical appliances. These latter we resort to as mere auxiliaries, and for the time that the hand cannot be used. Between the two, the mechanical treatment should be divided, and proper care should be taken that the apparatus is always so properly adjusted as to act effectively in the intended direction. In order to accomplish this, the patient should be constantly under the eye of the attending surgeon, or of a competent substitute, and the propriety of placing a patient in an orthopædic institution suggests itself most forcibly. For, to patients or nurses, such a duty cannot be assigned; they are neither competent, systematic, nor resolute enough.

To a certain extent, the remedies previously suggested comply also with the 3d and 4th indications. It is a common observation of orthopædic surgeons, that the relief of contracted muscles by tenotomy reacts most favorably upon the nutrition of the afflicted extremity, and nutritive supply promotes self-evidently its growth and development. Passive motion co-operates in the same direction. We may, however, do more to promote the motor power still extant, or maintain the fast deteriorating structure of the affected muscles. The most efficacious remedy in behalf of innervation is electricity. It should be used with assiduity every day, and for months in continuation; it will prevent structural decay and stimulate the existing mobility; you can concentrate its action upon single muscles and muscular groups; and, by perseverance, establish muscular action where none existed. Electricity is the substitute of volition, and the best local gymnastic agent. Next are friction with alcoholic liquids; with phosphorated oil, (phosphorus, gr. iij, dissolved in an ounce of warm almond oil;) the use of the flesh-brush, with or without cold irrigation, and such internal remedies as the case may suggest. Proper care should be taken to aid the generation of animal heat in the affected extremity, by advising the use of worsted stockings or flannel bandages. Besides this, a proper hygienic regimen should be observed, to promote the constitutional health.

With all, gentlemen, you may fail in your efforts through the intricacy of the case. All surgeons have had such experience, even in instances that seemed to be promising. Hence, we should advise you never to engage a cure, but simply to guarantee your skill and attention. Your professional dignity and prudence should prevent you from making a promise which you might be unable to realize. For the same reason, do not uncharitably judge the failure of your colleagues, because they may have done their full duty and failed, where you might have been equally unsuccessful.

We propose now to invite your special attention to the subject of tenotomy and myotomy, and render you conversant with the history, technicalities, and indication of that operation. In doing so at this juncture we shall obviate repetition.

Tenotomy and Myotomy.

These comparatively modern operations have, with surprising rapidity, extended the field of their practical utility and have become most indispensable auxiliaries in orthopædic treatment. Like the ophthalmoscope in ophthalmology, subcutaneous tenotomy has revolutionized the orthopædic branch of surgery, and promoted its effectiveness. The operation is trifling when compared with the results. If properly performed, it is scarcely ever followed by inconvenient symptoms, and the small wound it leaves in the integuments usually closes within twelve hours, by first intention.

Although the tendons receive an inferior supply of vessels, which diffuse themselves in the external sheath and internal partition of connect-

ive tissue, nevertheless their repair of injuries is most rapid and perfect. The experiments of Paget* upon rabbits are conclusive on this point, and confirm the respective observations of Lebert,† von Ammon,‡ Duval,§ Duparé,‖ and Brodhurst. A great difference is, however, noticeable in the reparative process of tendons, according to the mode of their division. In open wounds there is "more inflammation, and more copious infiltration of the parts than in subcutaneous division in the same rabbit." "Suppuration frequently occurs, either between the retracted ends of the divided tendon, or beneath its distal end." The skin is more apt to become adherent to the tendon, and to hinder and limit its sliding movements. The retracted ends of the tendons are more often displaced. so that their axes do not exactly correspond with each other, or with the reparative bond of union. The consequences of division may, however, be *reversed* by the skillful operation of the one, and a clumsy one of the other. Thus Paget¶ accomplished, in one of his experiments, first intention and speedy repair of a tendon of one leg, after an open division; whereas no repair had commenced on the twelfth day in the same rabbit in the other leg by subcutaneous section. That the delay of repair in subcutaneously divided tendons is not alone caused by the improper execution of the operation, we are satisfied from numerous clinical instances, and we believe that generally impaired nutrition is equally apt to favor separation of the divided tendon, and hinder the operative result.

The reparative process following subcutaneous tenotomy develops itself generally in such a manner that, at the instant of division, the fragments separate, "the *upper portion being drawn up* the leg, by the action of the gastrocnemius and soleus muscles," the lower remains opposite the wound. Very little blood is effused in subcutaneous operations, unless large vessels are divided. "Commonly only a few patches of extravasated blood appear in or near the space from which the part of the tendon is retracted." The first apparent consequence of the division of the tendon is the effusion of a fluid or semi-fluid substance, which, like the product of common inflammation, quickly organizes itself into the well-known forms of lymph or exudation cells, speedily becoming nucleated and elongated. The exuded lymph makes the tissues at and near the wound succulent and yellow; the blood-vessels enlarge. Both the exudation and the enlarged blood-vessels distend the parts, so that the skin is scarcely depressed between the separated ends of the tendon. In rabbits forty-eight hours elapse before the *reparative material* becomes apparent. This is deposited in the connective tissue that lies between and close to the ends of the tendons, as well as in the partitions of the tendinous fasciculi of those ends. It thus swells up the space between the separated ends, and makes them larger, somewhat ruddy, soft, and succulent. This apparently fibrous blastema becomes nucleated, and gradually converted into filamentous structure, and at length may become perfect fibro-cellular or fibrous tissue.

As the bond of connection thus acquires toughness and definite character, so the tissue around it loses its infiltrated and vascular appearance, wherewith the integuments become looser, and slide more easily. In the specimens* presented by Tamplin to the Hunterian Museum of the Royal College of Surgeons, England, the new tissue had to all appearance become identical with that of the original tissue.

As to "the strength of the new tissue, and its connection with the original substance by intermingling," Paget furnishes some illustrations. He removed from a rabbit an Achillis tendon that had been six days previously divided and suspended from a section of the same (longitudinal?) gradually increased weight. It bore for awhile ten pounds, and suddenly gave way. In another experiment, the same author employed a tendon that had been severed ten days previously, and he gradually increased the weight to fifty-six, before it parted. We can bear evidence to the great strength of the intermediate tendinous substance, having observed but *one case*, and this in an individual some fifty years of age, in which it gave way in a position comprising both the entire weight of the body, (162 pounds,) and extreme flexion of the foot. Not unlikely, the intermediate substance had remained in a state of fibro-cellular texture.

In the foregoing details of reparation in divided tendons, we have largely drawn from Paget's Surgical Pathology, which gives a most lucid exposé of the entire process. The results of his

* Lectures on Surgical Pathology. London, 1853, page 176.
† Abhandlungen der Practischen Chirurgie, page 403.
‡ De Physiologie Tenotomiæ.
§ Bulletin de l'Academie Royal de Medecine, 1837.
‖ Nederlandsch, Lancet, 1837.
¶ Ibid., page 119.

* Nos. 358, 359, 360.

observations having been derived from experiments with animals, whose muscles were in a state of structural integrity, represent only in a very general way the same process in man. In most instances in which surgery resorts to tenotomy as a curative agency, we have to deal with parts more or less deprived of normal innervation and nutrition. Hence the reparative process is more sluggish, and the transformation of the blastema into proper fibrous structure more or less protracted and imperfect. Yet, with all, the intermediate substance becomes, in the course of time, so strong and tenacious as to subserve the intended purpose. Then, again, the divided muscles and tendons have suffered more or less structural changes, which prevent them from retracting to the same extent as healthy muscles. This fact is worthy of note.

Another circumstance we have to mention as immediately connected with tenotomy, is the subsequent relaxing of the muscular belly a day or two after the section of its tendon, and the consequent approximation of its two fragments. Dieffenbach, we believe, was the first who called attention to this fact, and from that he inferred the antispastic effect of tenotomy. The explanation of the phenomenon is, that after section of the tendon the muscle contracts to the utmost of its capacity, and the excessive contraction subsequently relaxes by being tired out. We have observed analogous facts in the fracture of the patella, the olecranon, etc.

History of Tenotomy and Myotomy.

The first attempt at tenotomy is to be traced to Thilenius, who, in the year 1784, divided the Achillis tendon, after having made a free incision through the integuments. The patient, a girl of seventeen years, recovered, and the operation proved successful. The next operation of this kind was performed by Sartorius, on the 16th of May, 1806, upon the son of Martin Oust. The proceeding commenced with an incision four inches in length through the skin over the tendon; the cicatrices around the joint were carefully dissected off, the tendon transversely divided, and the foot broken straight by main force, whereby a crackling noise was heard. Michælis, on the 16th of November, 1809, in a case of club-foot, proceeded in a similar manner, with this difference, however, that he only *incised* the tendo-Achillis, rupturing the remaining portion.

The fourth operation of tenotomy was executed by Delpech,* on the 9th of May, 1816. His case was talipes equinus, in an infant two years old. With that sagacity which characterizes the entire surgical career of this truly great surgeon, he recognized the practical advantages of a *smaller* opening through the integuments and *remote* from the tendon, and virtually performed thus the first *subcutaneous* division.

Delpech† prescribed the following axioms in the performance of tenotomy:—

1st. The tendon to be divided should not be exposed; its section should be made by entering the knife at a distance from the tendon, and not through an incision of the skin parallel to it. There is danger of exfoliation of the tendon, unless this precaution be taken.

2d. Immediately after division of the tendon, the divided extremities should be brought in contact, and so held by a suitable apparatus until reunion is accomplished.

3d. As reunion can only take place by an intermediate fibrous substance, gradual and careful extension should be made to give the required length to the shortened muscles before solidification takes place.

4th. Extension being complete, the limb should be fixed in this position, and there kept until the new substance has acquired that firmness of which it is susceptible.

Although the result in Delpech's case was quite satisfactory, the patient having acquired the proper form and position of the foot, and being enabled to use it in locomotion with firmness and rapidity, it seems that it was the only tenotomy that surgeon ever performed.

Of Dupuytren it was said, that he adopted the plan of Delpech in several cases; but when, and with what benefit to the patient, we have not been successful in finding out.

For about fifteen years the operation of tenotomy was not repeated, when Stromeyer not only resuscitated, but established it at the same time on a secure and permanent basis. His first tenotomy‡ was upon George Eblers, a young man of nineteen years, resident of the City of Hanover, and was performed on the 28th of February, 1831.

The discovery of Stromeyer, that tendons and muscles might be subcutaneously divided with impunity, opened at once a wide field for orthopædic exploits. The prominent surgeons of Ger-

* Chirurgie Clinique de Montpellier, tome i., 1823.
† De l'Orthomorphie, tome ii., 1828.
‡ Rust's Magazin. Band xxxix. p. 193. 1833.

many eagerly took hold of the new operation. The observations of Stromeyer were at once and everywhere put to a practical test. Very soon the medical periodicals abounded in praise of the new orthopædic measure, which was unanimously pronounced to be both harmless and efficacious. All cripples in the land were hunted up and invited to obtain relief by the new proceeding. Dieffenbach alone, if we mistake not, performed more than two hundred operations in the course of one year, and other surgeons large numbers in proportion to their popularity and public trust. From the various scientific centers in Germany, tenotomy radiated with unexampled rapidity to the remotest corners of the civilized world. Enthusiasm ran into a tenotomic fever, which took the character of an epidemic. Experience has established the true basis upon which the operation rests. It has decided the applicability of tenotomy and the non-applicability. It has put in a proper light both its merits and abuses. Since its advantages and demerits have been duly established, it has been recognized and incorporated in scientific surgery.

Technical Rules of Tenotomy.

For the object of the operation it is indifferent from which side a tendon is divided, whether from within or without, provided a small wound be made and proper care be taken to exclude air. Most surgeons prefer, however, to enter the knife behind the tendon and divide it toward the surface of the body. Some tendons are placed in such close proximity to nerves and vessels that the other way suggests itself as preferable, on account of the lesser danger of injury. Thus, for instance, in dividing the external hamstring we can more readily avoid the peroneal nerve, and consequently paralysis of the peronei muscles, by approaching the tendon externally.

The next technical rule is the appropriate position of the patient. The parts to be operated on should be well exposed to light, well accessible to the hand of the operator, and allow all the changes that may be demanded by the operation.

Further, the extremity requires to be immovably fixed by reliable assistants in a directly *reverse* position to the existing deformity. This precaution is indispensably necessary: *a*. To render the tendon (or muscle) more defined, recognizable, and accessible. *b*. To raise the tendon (or muscle) off from the adjacent parts.

To be continued.

COMMUNICATIONS.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

By Geo. K. Smith, M.D.,

Demonstrator of Anatomy in the Long Island College Hospital Brooklyn, New York.

Continued from page 387.

"No. VI. *Mr. Jones's Case.*—Jenkins Thomas slipped down as he was returning home one evening about the middle of October, 1838; he was seen on the following day, by Mr. Cole, House-Surgeon to the Infirmary, (Worcester,) who detected what he considered to be a fracture of the neck of the femur. He applied a splint to the outside of the limb, extending from the pelvis to the foot, and bound the legs together, making use of the left as an inner splint; a bandage was applied around the pelvis. In about eight weeks the splints and bandages were removed, and he was allowed to get up soon afterward. During the following spring and summer, he was able to move about with the assistance of a stick, but with the limb shortened about an inch and a half, and considerably everted. He came under my care as an inmate of St. Oswald's Hospital, January 13th, 1840, and died on the 20th of April following, of chronic disease of the lungs. At the time of the accident, he was more than eighty years of age, and he survived the injury one year and a half. On dissection, the capsular ligament was found very much thickened, and the space between the trochanter major and the edge of the acetabulum greatly contracted; the bone was macerated, and a vertical section made through the head, neck, and upper part of the shaft; the neck of the bone was found to have been broken within the capsule: the fracture extended through the basis of the head of the bone, in the line of its junction with the neck: it was firmly united by osseous matter. The bone was first macerated, it was subsequently immersed for several days in a strong solution of carbonate of potash, and one-half of it was boiled in water for three hours without the slightest yielding perceptible in the line of fracture. This specimen, which is preserved in the museum of St. Bartholomew's Hospital, was sent to Sir Astley Cooper, for examination. Sir Astley was of opinion that the fracture was 'in part within, and in part external to the capsular ligament; in part united, and in part not, and the neck of the thigh-bone absorbed.'"*

On referring to the original history of the case, I find that Mr. Smith has omitted to quote some of its most important points. Mr. Jones states that—

"On dissection, the capsule was found very much thickened, and it was not until the shaft

* Smith on Fractures, page 62.

of the bone was divided that the knife could be passed around the joint, so contracted was the space between the trochanter major and the edge of the acetabulum. The direction of the fracture could not be traced, or the bond of union made out, until the bone had been macerated. As portions of the capsule became loose, they were removed by the forceps, which enabled me to discover, what I believe to be the case, that the fracture occurred entirely within the capsule."*

Mr. Stanley saw the patient, and the following is from his history of the case:—

"The history of the case is clearly that of fracture of the neck of the femur; the appearances of the bone show that there has been a fracture which has reunited by an osseous medium, and the direction of the fracture is such as, in my opinion, can permit no doubt that it was confined to the portion of the neck covered by synovial membrane; consequently, that it was wholly within the capsule. The fracture extends through the basis of the head of the bone in the line of its junction with the neck. As in other cases of the same kind, a great part of the neck has disappeared, and, in consequence, the head is proportionately nearer to the trochanter major and shaft of the bone; *its reunion has*, in fact, taken place in part to the remaining portion of the neck and in part to the shaft."†

If it be true that "the fracture extended through the basis of the head," it is equally true that the head of the bone remained in its socket, unchanged, during the time required for the complete removal of the neck by absorption, and that, after this process was completed, the shaft was approximated to the head, and union occurred. It is by no means probable that the fracture occurred at this point; for we are bound, in obedience to the laws which govern the process of absorption, to expect that the fragment which is most imperfectly supplied with the elements of nutrition will suffer greatest loss by absorption. After fracture of the neck, the femoral fragment is abundantly supplied with blood by the nutrient artery of the femur and the vessels of the periosteum covering the neck, while the acetabular fragment is left with no other supply than that of the small vessels which enter the joint through the ligamentum teres; therefore we cannot conceive it possible that the loss by absorption was entirely at the expense of the fragment attached to the shaft of the bone. It is impossible to tell the point at which the neck was broken; yet it is highly probable that the fracture was nearer the shaft of the bone than the middle of the neck, and that the loss by absorption was mainly at the expense of the fragment attached to the head of the bone. The engraving of the posterior surface of the specimen exhibits the neck removed by absorption, and the head of the bone closely approximated to the inter-trochanteric line, and to the apex of the trochanter minor, and *consequently there can be no doubt that the line of union on this surface is external to the normal capsule.* This engraving may be found in the twenty-fourth volume of the Med.-Chirurg. Trans., but is not seen in "Smith on Fractures." Mr. Jones's opinion that the fracture was intra-capsular, was founded on the fact that the line of union was included by the capsule of the specimen, and since the insertion of this capsule was removed so far from its normal position that it was found to include the line of union, which was close to the shaft of the bone, the opinion of Mr. Jones furnishes no evidence that the fracture was within the normal capsule.

No. VII. *Mr. Chorley's Case.*—This case is cited by Mr. Smith in proof of bony union of intra-capsular fracture, while the description of the specimen affords positive evidence that the fracture was not entirely within the capsule; thus we find that "a portion of the upper fragment extended in one situation a little external to the capsule."* Malgaigne, under the head of "Intra-Capsular Fractures of the Cervix Femoris," says:—

"This name is given to fractures dividing the cervix within the limits of the synovial membrane, so that if this membrane were divided at the same level, the fracture would communicate at once with the joint."†

Mr. Smith concludes by saying that—

"The preceding cases furnish ample evidence of the possibility of the occurrence of osseous union in cases of intra-capsular fracture of the neck of the femur, and it is highly probable that they have all been examples of impacted fractures: certainly in all those, of which delineations have been given, there has been either penetration of one fragment by a portion of the other, or else the irregularity of the line of fracture has been such that the displacement of the fragments has been prevented; they have been maintained in contact and at rest, and it is under such circumstances alone that we are to hope for the occurrence of bony consolidation."‡

Mr. Smith's conclusion that union in all those cases "of which delineations have been given,"

* Medico-Chirurg. Trans., vol. xxiv.
† Ibid.

* Smith on Fractures, p. 63.
† Malgaigne on Fractures, p. 530.
‡ Smith on Fractures, p. 64.

is due to the fact that the fragments have, in each case, been impacted in such a manner that displacement has been prevented, is beautiful in theory; but unfortunately it does not harmonize with his record of the changes consequent upon the injury. He states that—

"The superior fragment of the broken cervix usually disappears to the level of the brim of the acetabulum, either in consequence of the action of the absorbent vessels, or by the friction of the broken surfaces, or perhaps it is due to a combination of both these causes. The absorption, however, sometimes extends much further; I have seen half of the globular head of the bone thus removed, and a case has been recorded in which the head of the bone was completely absorbed. In old cases the femoral fragment is likewise absorbed to a greater or less extent; sometimes it disappears entirely to its base. * * * The absorption of the lower fragment is sometimes effected with extraordinary rapidity; in Case No. IX. the shortening of the limb which immediately followed the receipt of the injury was only a quarter of an inch, but after the expiration of six weeks it amounted to one inch and a half; and in Case No. XII. the removal of the greater part of the neck of the bone was accomplished in less than a month."*

If Mr. Smith regards the cases in question as exceptions to the general rule, that absorption follows the fracture, then we ask how he accounts for the complete removal of the neck in Cases V. and VI.?

The history of No. V. (Mr. Adams's case) states that—

"Scarcely any portion of the neck can be said to have been left. The head and shaft seem to be mutually impacted into each other, and almost the whole of the cervix has been absorbed."

The history of No. VI. (Mr. Jones's case) states that—

"This specimen was sent to Sir Astley Cooper for examination. Sir Astley was of opinion that the fracture was 'in part within, and in part external to the capsular ligament; in part united, and in part not, and the neck of the thigh-bone absorbed.'"

If absorption did follow the fracture in each of these cases, to the complete removal of the neck, the impaction of the fragments, which Mr. Smith considers so indispensable to bony union of this fracture must have been loosened, so that in accordance with his own theory he could not have "hoped for bony consolidation." Certainly the force of the blow which produced the fracture was not sufficient to crush and obliterate the neck. The sections of these specimens show that the neck has neither been driven into the shaft nor the head of the bone; yet the neck is gone, and the head is united to the shaft. (See plates on pages 61 and 63 of Mr. Smith's work.) *I do not see how these specimens can be regarded as examples of impacted fracture; neither do I see how it can be known that the fracture, in either case, was within the normal capsule; but if the fracture in each case were intra-capsular, these specimens furnish strong encouragement for us to hope for bony union, under favorable circumstances, if the fragments be approximated, even after the entire removal of the neck by absorption.*

The following seven cases were reported in the April number of the *American Journal of Medical Sciences* for the year 1857, by Reuben D. Mussey, Professor of Surgery in the Miami Medical College of Cincinnati, Ohio.

"Case I.—Mr. S., aged 78 years, a hardy yeoman from one of the hilly districts of New England, when more than a hundred miles from home, upset his two-horse wagon, fell on his left hip, and could not get up. He was carried into a house and was visited by Dr. J. C. Dalton, a highly distinguished professional gentleman, who pronounced the case to be one of fracture of the neck of the thigh-bone, and proceeded to apply a modification of Desault's long splint. In four or five days the patient became so restive under his confinement among strangers, that he employed a carpenter to prepare him a box which should receive a bed together with himself and splint, with a view to return home

"When the doctor heard of this he remonstrated with no small degree of emphasis against the project, but without avail; the old man said he might as well die in one way as another, and home he would go. When the box was ready he was wagoned home, and was carried forty miles on the last day of his journey.

"Eighteen days after the injury I visited him. He made a somewhat singular appearance lying in his box, which, to accommodate himself and splint, he being over six feet high, was not much less than ten feet in length. On removing the bedclothes, I perceived that his knee and foot were turned considerably outward. I took off the splint, and gave some passive motion to the hip, without his complaining of pain; I then flexed the thigh to a right angle with the body, and kept it a minute or two in that position. This, too, was done without giving pain; on flexing the thigh to an angle a little acute, he complained that it hurt him in his groin. Pressure with the fingers upon the groin and behind the trochanter major, both in the flexed and extended position of the limb, gave him decided uneasiness. I compared the length of the limbs as well as I then

* Smith on Fractures, p. 42.

could, without being able to satisfy myself that there was shortening of the injured limb. I then asked the old gentleman if he wished to get up. He said that he did, but could not. He was assisted to get into a chair, and sat for some time. From that day onward he wore no splint, and was got up from his bed daily. I gave it as my opinion that the neck was not fractured, inasmuch as it had strength enough to support the weight of the whole limb for a minute or two, but did not satisfy myself as to the exact nature of the injury. Soon after this I received a letter from Dr. D., who expressed surprise at the opinion which he understood I had given, saying that on his first visit to the patient he found the limb everted and shortened more than an inch, and also detected crepitus. I wrote him in reply that I founded my opinion on the fact that there was strength enough in the neck to support the limb without causing pain or doing manifest injury. In the course of four months the patient could walk with a cane, but remained lame, and could never ride on horseback, as he had formerly been accustomed to do. Between two and three years after this, he died of an acute attack of visceral disease. The bone, on being carefully cleaned, presented the following appearances, viz.: the neck shortened, and on its front a groove or depression running in a zigzag direction close to the head. The shaft rotated outward, so as to bring the corona of the head within one-third of an inch of the posterior inter-trochanteric ridge; while the distance of the corona of the head from the anterior inter-trochanteric line is one inch and three-eighths, and the head sunk below the level of the top of the trochanter major, making a shortening of more than half an inch. A vertical section of this, made by a saw, shows a consolidation of the fracture by a deposit of a mass as compact and white as ivory."*

The history of this case is interesting, as an illustration of the extreme difficulty which often attends the accurate diagnosis of injuries about the hip-joint. No one questions the ability of either of these distinguished surgeons, yet while Dr. Dalton was positive that the neck of the thigh-bone had been fractured, Professor Mussey was equally confident that the fracture had never occurred; and it was only the appearance of the dried specimen after the death of the patient that convinced him of the truth of Dr. Dalton's opinion. This is the specimen which gave rise to such a diversity of opinion among European surgeons when exhibited to them by Professor Mussey in the year 1830.

Assuming that the bone was fractured, a supposition which is not clearly proven to be based upon truth, either by the history of the case or by the appearances of the specimen, we have only to ask, was the fracture and its subsequent union entirely within the normal capsule?

The description of this specimen corresponds with the engraving accompanying it, and shows—

"The neck shortened, and on its front a groove or depression running in a zigzag direction close to the head. The shaft rotated outward, so as to bring the corona of the head within one-third of an inch of the posterior inter-trochanteric ridge; while the distance of the corona of the head from the anterior inter-trochanteric line is one inch and three-eighths."

The shortening of the neck of this specimen has been mainly at the expense of its posterior surface, the anterior surface remaining nearly as long as it was before the injury. In this respect it closely resembles the specimen owned by Professor Parker, and nearly all other specimens, the necks of which are in any degree shortened.

The outward rotation of the limb, and the consequent friction of the posterior surfaces of the fragments with each slight movement of the patient, is without doubt the exciting cause of this local absorption of the neck, and is probably due, in most instances, to an effort on the part of the patient to relieve pain by relaxing the muscles of the hip which have been injured by the blow producing the fracture. The force of gravitation would also, especially during his sleeping hours, rotate the limb outward, the weight of the limb being on a line external to its point of support at the hip.

The line of union, on the posterior surface of the neck, as shown by the engraving of a section of this specimen, approaches as near to the shaft of the bone as the base of the trochanter minor, a point which, in some instances, will be found three-fourths of an inch or more external to the normal capsule; and I have yet to see a single specimen of the normal capsule which would include this line of union.*

To be Continued.

A Brigade Surgeon!—One of the Brigade Surgeons recently appointed is said to be a person who has for some time been an advertising venereal doctor in this city, and who has until recently occupied an office which is still covered with his glaring signs at a conspicuous street corner. We believe that the same individual presented himself before the Examining Board of the State of Pennsylvania, and was rejected on account of his connection with the business alluded to.

* American Journal of the Medical Sciences for April, 1857.

* See American Journal of the Medical Sciences for April, 1857, p. 300, Fig. 2.

Palatine Defects and their Treatment.

By James E. Garretson, M.D.,
Of Philadelphia.

Diseases of the Mouth—*Continued.*

Obturators.—The instrument or plate called an obturator gets its name from the Latin verb "*obturare*," and signifies a something that shall close or stop up an entrance or break. Thus, after the operation of trephining, it is not uncommon to shield the exposed brain against risk of accident by fitting a silver plate over the site of the removed bone; and this shield is, to all intent and purpose, an obturator—it closes the break in the continuity.

In the treatment of palatine defects obturators may be employed with the greatest success; the range of their application is really wonderful. I have seen one case, at least, where the whole side of a face has been so completely restored through such instrumentality, that a passing observer would scarcely, I think, have remarked anything amiss with the wearer.

In the consideration of the more strictly surgical treatment of palatine defects, we studied the operations which suggested themselves as being the most effective and promising. It is not, however, as we will find, every patient who is willing to submit to an operation, and it is not, on the other hand, as we are prepared to understand, every case that is fit to be operated upon. To leave either class of persons to their ill fate would be as cruel as it would be unnecessary; it is here, therefore, we may so happily resort to the means known as the surgico-mechanical.

As obturators are to fulfill variable indications, so, of course, do they vary in form, style, and method of manufacture. The most simple obturator is one made to cover a break, more or less extensive, in the hard palate proper; that is, a break that does not implicate either the alveolar borders or the soft palate. Such an obturator holds the same relative position to obturators in general that the Physic-Dessault apparatus holds to all apparatus for thigh fractures. Both may be termed principals, and any or all variations are but modifications of these principals. Thus, if I explain the style, indications met, and mode of manufacture of a simple obturator, I exhibit fully the genius of the instrument, and enable the surgeon so to appreciate the mechanism of the piece that he will be prepared to diminish or enlarge its capacity *pro re nata.*

A patient presents himself to us suffering under a deficiency in the hard palate. We examine the case, and find the walls of the break so heavily and solidly indurated that we perceive at once any attempt to pare and bring the parts together would be futile. Palato-plasty at once and naturally suggests itself, but observation of surrounding parts convinces us that the risks are too great for the good promised. Such is a case that not unfrequently offers itself to the surgeon's judgment. Dieffenbach, whose name is so honorably associated with oral surgery, evidently found himself much bothered with just these cases, cases which I would here present as the easiest of remedy, by use of the obturator. It was Dieffenbach, it will be remembered, who suggested the stud of India-rubber. Two pieces of rubber the thickness of pasteboard were cut three or four times larger than the opening to be closed, and between these was placed a small round piece, the whole was then securely fastened together by means of waxed thread; one of these pieces was intended to rest on the posterior, and the other on the anterior surface of the opening; the small middle piece was for the intermediate space.

A single moment's reflection will exhibit the inconveniences as well as the more striking faults of such an appliance. The rubber, unless it was vulcanized, (and which, to be so applied, it could not be,) would soon become very offensive. It would act as a continual source of irritation, and particularly as far as the posterior base of the cleft is concerned. The center piece, which, to hold the parts with any degree of steadiness, would have to fit the opening with some degree of accuracy, would, because of the presence of moisture and heat, soon expand, thus enlarging the canal. It would be very inconvenient to remove for the purpose of cleansing, which cleansing it would certainly demand daily.

A case amply illustrative of the inefficiency, and as well, indeed, of the absolute harm resulting from this mode of treating palatine defects, is recorded by Dr. J. H. McQuillen, of this city, in the *Dental Cosmos.* The patient, who had an opening in the palate, the result of syphilis, was treated by Dr. Neall, who employed, in the first instance, India-rubber as a substance from which to construct an obturator. This was cut somewhat in a button shape, being large above and below and contracted in the center, thus constituting an apparatus which was retained in position by resting on the floor of the nares, surround-

ing the orifice. After it had been worn a week or two, the patient returned, when it was found quite loose, and the orifice somewhat enlarged, the rubber having acted as a source of irritation, and induced absorption. Another apparatus was formed from the same material, and, after being worn a week or so, the orifice was found much larger than at the previous meeting. The rubber was also found considerably affected by the fluids of the mouth. Satisfied that it would not answer the purpose intended, this material was abandoned, and a simple obturator of silver was constructed, covering the orifice and roof of the mouth. This was found to answer every indication.

There is another, a somewhat domestic treatment for these defects, which I may here allude to. This consists in stuffing the break with cotton or wool. Besides being a filthy, this latter is a quite dangerous practice. The cotton not unfrequently escapes into the throat, or, passing into the nares, it has sometimes produced ozena, by lodging among the turbinated bones; quite extensive necrosis of these bones has been in this way provoked.

A case of a different class, yet belonging to the same category, as treatment is concerned, invites, in connection with the consideration of simple obturators, a moment's attention. This is the existence of a cleft or break associated with subacute or chronic disease—the cases to which we allude as not being fit for operation.

Some time since Mr. ——, a French teacher of this city, had necrosis of the palatine arch, the result of venereal disease; the sequestrum that came away was quite large, producing a break in the continuity of the hard palate quite an inch in diameter, of course freely exposing the nares. The result was, as might be anticipated, his vocation as a teacher had at once to be relinquished.

I saw this case, in consultation with the attending surgeon, about a month after the patient had resigned a situation which he held in one of our principal private schools, and upon which, up to this time, he had mainly depended for his income. The necessities of the man were, of course, immediate, and any operation for the restoration of his speech was out of the question. I had the happiness of relieving the man of his trouble so perfectly in three days, by the use of an obturator, that every time he has since met me he has laughingly assured me that he speaks much better English than before his accident. It is certainly true that he speaks quite as well.

The obturator for these cases consists simply in making a metal plate that shall fit accurately every part of the hard palate, the regularity of the arch to be restored by carrying the plate over the cleft or break. Such a plate should fit with the greatest nicety, and is to be held in place either by bands placed around certain of the teeth, or otherwise by means of atmospheric pressure. The first plan of fastening the piece should be employed when disease is associated with the cleft. The latter is well adapted when the break is not too large, and where all disease has long passed away. To make such an obturator—and which can be best done with the assistance of the dentist—we first take an ordinary impression cup, such as is employed in taking casts of the mouth, an article that can be obtained at any dental depot for from fifteen to twenty cents. This cup is filled with ordinary beeswax, softened before the fire to the consistency of dough. Thus prepared, the operator takes his position behind the patient, as recommended in the operation of staphyloraphy. The cup is now to be introduced carefully into the mouth, and carried just so far back as will allow of the teeth being included within the arch or rim of the cup. This accomplished, cup and wax, in a body, are to be pressed firmly up into the roof of the mouth and around the neck of the teeth and alveolar border. The patient holding the mouth very wide open, the mass is to be removed even more carefully than it was inserted. This manipulation, if properly executed, gives us the exact impression of the mouth. The next step is to make a model. To do this, we take the impression we have just obtained, and surrounding it with a rim of paper, the rim to be say one and a half inches in height, we stir into water the common calcined plaster—sulphate of lime—until we have a very thick, creamy paste. This paste is poured into the impression, and should be enough to fill from the wax, which lies at the bottom, up to the top of the rim. The model thus made is not to be disturbed for three or four hours; it must have time to set.

The next step in the operation is to remove, from about the plaster cast we have just made, the paper and wax. This is accomplished, first, by heating gently the cup in which the wax lies, which permits of its easy removal; and next carefully trimming from about the necks of the

teeth, by means of a knife-blade, kept constantly warm, the wax which so closely surrounds and imbeds them; in this way the wax may all be safely taken away. This paper is, of course, simply to be torn away, and this is done before removing either cup or wax. Comparing the face of the model then made with the mouth from which the impression was taken, we shall find we have its counterpart to the minutest particular.

As the model contains the break in the arch, and it is our intention to restore this arch to its original and natural contour, so is it at this step in the procedure that we can best secure our object. This, I think, is easiest done by taking a little ball of warm wax, and filling with it the hole or break in the model. The natural concavity of the arch is in this way restored. Of course this is not at all difficult, nor is there any guess-work about it, as we have the inclinations of all the surrounding parts to guide us, and all we have to do is simply to model this wax to the proper curve.

The cast is finished by beveling the portion which rested against the paper; this beveling to be so done that the greatest diameter of the model shall be its base.

This completes the model to which the obturator is to be made.

The next step is the preparation of dies. These are to be made, one of zinc, the other of lead; and the process of getting up such casts is precisely the same as that adopted by the dentist or the moulder.

Take a circle of tin—a common tin cup, with the bottom broken out, answers the purpose admirably—lay the model you have prepared upon the table, the palate face looking up. Now place the circle of tin over it, and with some moulder's sand, very fine, which you have previously moistened and tempered, cover in the model, packing and filling the circle completely. Now turn the circle or cup so that the base of the cast looks up. Next a penknife-blade or small gimlet is to be inserted into the plaster, and by striking it several light taps the cast will be found to be loosened. It is now to be lifted by means of the knife-blade from the sand. Thus we have a mould for a metal casting. The next step is the making of such a cast. To do this we have only to take one or two pounds of the common zinc, and melting it in any convenient vessel, pour it slowly into the mould. This done, let the whole remain undisturbed until completely cold.

Thus, it is seen, we have prepared, with little or no labor, a correct model of the mouth in metal. It is to this zinc model we are to fit and adapt our obturator. Now this latter process is easy or difficult, according as one goes about it. One method is to take hammer, files, and pliers, and cut, file, and mallet, until the adaptation is secured. Such a task is almost as hard as was supposed to be the cleaning of the Augean stables; besides, it is next to an impossibility to properly accomplish it. A second plan, and which is as easy, simple, and interesting, as the other is difficult, perplexing, and annoying, consists in making a counter model in lead, between which and the model, or male cast, the plate or obturator is to be struck up. This counter model is very easily made, as follows:—

Take the zinc cast and lay it upon the table, with the face or palatine surface looking up; lay over it the cup or circle, precisely as in the case of the plaster model. Now, with the sand moistened as before, fill up the cup covering in the cast—packing the sand as solid as possible. Next, without disturbing the cup as it rests upon the table, take a knife, and dig away the sand until you expose the face of the cast. You are now prepared to make the counter model. Take a vessel, not the one in which you melted the zinc, and place in it two or more pounds of lead; when melted pour this over the face of the zinc cast, filling up to the very top the hole which you have dug out in the sand. When the lead has become cool, take the castings from the sand, and, with a hammer, the two can be easily knocked apart.

To make the obturator, by means of these dies, we next proceed, as follows: A piece of thin sheet lead is forced with the fingers over the face of the zinc cast; with a sharp and delicate-bladed knife this lead is cut so as to cover accurately the hard palate, being even festooned so as to adapt itself accurately about the necks of all the teeth. This palate of lead being thus nicely and correctly fitted to the parts, it is taken off, and the casts carefully spread out. Next it is laid on a piece of gold or silver plate, (such as is easily procured from any jeweler or at any dental depot,) and the outlines distinctly marked out with cutting forceps; the shape of the arch, as marked from the lead, is then cut out from this second piece of metal. The next step is the process of annealing, or softening the metal, so that it shall be as malleable as possible. This consists in

subjecting it to a red heat, and which may be done in any convenient manner. The dentist lays the piece on charcoal, and throws over it, by means of a blow-pipe, the flame from his alcohol soldering lamp. This does it very nicely.

It is next to be taken up, and with the pliers bent so as to fit the cast tolerably; it is not, however, at all necessary, in this procedure, to give one's self unnecessary trouble. Next take up the counter model, and lay it carefully over the zinc—the plate being between the two. With the hammer the casts are now to be driven together. In this step of the operation it is rather desirable that we should feel our way, that is, hit the models a few slight taps, and then taking them apart, see if the plate is going as you want it. If all is right, then the casts may be driven into each other with all reasonable force. If, on the contrary, the plate is not taking a proper direction, it must be so inclined by means of the pliers. To complete the finish of the plate itself, it may, perhaps, require that the festoons, which are to embrace the necks of the teeth, be cleanly cut out by means of the ordinary round file.

Thus we have our obturator completed. If we place it in the mouth we will see that we have restored the arch, by our contrivance, to its original condition, at least so far as purposes of speech and mastication are concerned.

Nothing now remains but to secure the piece firmly to its place. And this brings us to the consideration of modifications of the instrument.

Now, if a patient, for whom we had made such an obturator as that the manufacture of which I have just described, had certain good sound teeth, we might proceed to fix the piece in the mouth as follows: Going back to the plaster model, we would fit around such teeth as might seem to us best, delicate bands of metal—gold should always be preferred; these bands should fit the teeth with great accuracy, and should be fixed to their places while the obturator is lying on the model. Take next a particle of wax, and stick the plate and bands together. Now carefully lift all from the model, and set in plaster. This last manipulation is accomplished by laying the piece on charcoal, and pouring over all, the wax alone excepted, the creamy plaster, before alluded to. When this plaster sets, the wax is taken away, and there is exposed a small portion, both of obturator and bands. These parts are to be soldered together.

This last process fits the piece for the mouth. In placing it in position, we have only to slip the bands over the teeth, and we will find that it is held with all security.

Another plan of securing the apparatus to the mouth is by means of atmospheric pressure. To accomplish this, a cavity is to be made in the piece. This is done by placing on the plaster model, before making the castings from it, a piece of wax; its shape may represent, in diameter and thickness, the ordinary half dime. Or, perhaps, we cannot find a surface on the arch for a suction of such size and shape; if so, it may be lessened, or the shape may be modified so as to suit any case. What we want is a cavity in the plate; the size and location is not of so much consequence. Such a piece of wax will, of course, be represented by zinc in the casting, and by a depression in the counter cast. In forcing the plate between the dies the portion represented by the wax is thrown up, thus when the plate is in the mouth a cavity is formed. The obturator is held, in this case, by making an air-pump, as it were, of the tongue, and sucking the air from the cavity. I have seen obturators, thus dependent on atmospheric pressure for fixedness, held so tightly that it required quite an amount of force for their removal. This is the principle which the dentist employs for holding artificial teeth in place. And the whole modus operandi will be perfectly understood at a glance, by looking at any half set of teeth made for the superior jaw.

To be continued.

General Symptoms and Physical Signs of certain Chest Diseases which sometimes attend Pulmonary Tuberculosis.

By A. P. Dutcher, M.D.,

Of Enon Valley, Lawrence County, Pennsylvania.

PART FIRST.

Pulmonary tuberculosis very seldom runs its entire course without being complicated with some other lesion of the chest, such as bronchitis, pneumonia, pleurisy, and emphysema. When any of these affections occur during the progress of phthisis, they produce physical signs quite different from those which characterize the original malady. We propose, in this number, to notice very briefly some of these signs.

Let us take as our first example a case of pulmonary tuberculosis complicated with *bronchitis*. Mary A., aged fifteen; has been ill for six weeks

her pulse 93, and respiration 28; cough and mucous expectoration; appetite not good, and digestion very imperfectly performed; bowels quite loose; fever every afternoon and evening; pain in the head and back; urine scanty and very high colored. Thompson's gingival margin very clearly defined on the gums. Microscopic examination of the sputum show an abundance of withered pus-corpuscles, and shriveled nuclei, with the common products of mucous expectoration. Mother died several years ago with phthisis.

On inspecting the chest, no difference could be detected in the expansion of the two sides. Percussion yielded no dullness on either side. The only sound elicited on auscultation was *sonorous rhonchus*. This sound was loud and clear over the region of all the larger bronchi.

Although the general symptoms pointed out the existence of phthisis, yet, from the absence of all the more prominent physical signs of any permanent injury from tubercular deposits in the lungs, we regarded the present difficulty as mostly bronchial, and gave a favorable prognosis.

After attending her for three weeks, there was a material improvement in all the symptoms, and I fondly hoped that my patient would soon regain her usual health. But in this I was disappointed. She appeared to improve a little for about two months, when she suddenly became much worse. She complained of great weakness; her pulse and respiration became more rapid; and, in short, all the symptoms of hectic were very prominent. Sonorous rhonchus was very loud, and masked all the other auscultatory signs. There was little or no dullness on either side; and on inspection, no inequality could be detected in the expansion movements of the two sides. Her decline was very gradual, and she fell a victim to the disease in six months from my first visit.

Post mortem showed limited tubercular deposits in the superior lobes of both lungs, in various stages of softening, with a few small cavities. The middle and inferior lobes of the right lung were very much congested. The bronchial mucous membrane was thickened, and in several places studded with quite a number of small ulcers, proving very conclusively that it had borne the chief shock of the disease.

In all cases of phthisis complicated with bronchitis, sonorous rhonchus is generally very loud, so much so that it will sometimes mask every other sound. But sonorous rhonchus is usually intermitting. Thus, the act of coughing and expectorating all the matter contained in the bronchial tubes will temporarily suspend it, and if we embrace this period, we will sometimes hear other sounds which may be present. I have a patient now under my care, who has a large suppurating cavity in the superior lobe of the left lung, who has suffered very much with bronchitis from the very commencement of the tubercular affection. When the bronchia is free from expectoration, cavernous respiration is very audible, but as it becomes engorged with matter, the cavernous respiration will gradually give place to sonorous rhonchus. I have not the least doubt if a careless auscultator should examine this case, he would in all probability pronounce it a bad case of chronic bronchitis. It illustrates very clearly the value of a minute knowledge of auscultation, and a careful application of its principles, when employed in diagnosticating the various complicated maladies of the chest.

But sometimes sonorous rhonchus is indicative of tubercular disease. How are we to distinguish in this case? When the sound is heard at the summit of the lung, we may generally conclude that it is tubercular in its origin; when heard at the base, it is usually bronchial. I am acquainted with but one exception to this rule; and that is in those cases of chronic bronchitis complicated with dilation of the bronchi, where distinct pouches are formed. In this instance, the diagnosis from the physical signs is extremely difficult. Where these pouches are very large, they may be very readily taken for tubercular cavities, if we rely exclusively upon the physical signs. A microscopical examination of the sputum will greatly aid us in solving this problem, and give us a direct clue to the nature of the malady. I have on several occasions met with cases of chronic bronchitis attended with bronchial pouches that have been regarded by other physicians as tubercular. If the microscope had been used to examine the expectoration, they would not have fallen into this error in their diagnosis.

PART SECOND.

Pneumonia is a very frequent attendant on pulmonary tuberculosis. It may occur at all stages of the disease, and is a very serious complication. Some authors have considered pneumonia as the primary cause of tubercles in the lungs. We cannot subscribe to this opinion. Tubercles are unquestionably heterogeneous in

their nature, and, to express our idea in common language, have no more business in the lungs than so many gravel stones. That they should excite irritation, inflammation, and its attendant consequences, is not to be wondered at. The wonder is, that they frequently remain in the lungs so long and produce so little trouble. Pathological observation teaches us that nature is sometimes very accommodating in this particular: she very frequently disposes of these intruders without suffering them to destroy the pulmonary tissues to any considerable extent. We allude to the arrest of tubercular disease by cretaceous formations. These are often found in the lungs of individuals who have died with other diseases.

But when tubercles soften and cavities form, they are evacuated by ulceration, which is one of the results of inflammation. As a general thing, the inflammatory process is confined to the immediate vicinity of the tubercles; but frequently it will extend its influence far beyond this, involving the whole lobe of the lung in which they are deposited, and even an adjoining lobe. Hence in addition to the usual physical signs of phthisis, we will have some of those which belong to pneumonia, particularly *crepitant rhonchus*. At the beginning of the inflammation, this morbid sound will only be heard at the commencement of inspiration and at the end of expiration; but as the affection advances, and the inflammatory process becomes more complete, it accompanies the whole respiratory act, when it masks all the other sounds, and without a previous history of the case, it might very easily be set down as one of simple pneumonia. Sometimes the crepitation will extend far beyond the point of the tubercular deposit and compass one lobe, or all the lobes of the affected side, and render the diagnosis by the physical signs very uncertain.

How often is it the case that, after attending an individual through an attack of pneumonia, perhaps very mild in its character, and we have prognosticated a happy termination of the disorder, we are suddenly aroused to the sad fact that the chief exciting cause of the inflammation has been tubercular deposits in the lungs, and nothing remains for our patient but a series of similar attacks, which will sooner or later terminate his existence! Very frequently have I met with instances of this kind. Here is a brief description of one of them.

In the spring of 1860 pneumonia was unusually prevalent in this vicinity. I had a large number of cases, and among them was a young woman, aged eighteen. She had generally enjoyed good health up to the evening of her illness. The disorder was ushered in by a severe chill about four o'clock in the afternoon, which was followed by fever, flushed face, headache, pain in the back and limbs. When I was called to see her, at nine o'clock the same evening, she complained of a deep-seated feeling of heat and weight in the chest, but no pain or stitch in either side. Her pulse was 120 per minute, and respiration 40; dyspnœa somewhat urgent, compelling her to lie on her back, with her shoulders very much elevated. Cough very frequent, and expectoration scanty, consisting of glairy mucus streaked with blood. The bowels were costive, and the urine scanty and very high colored.

The physical signs were very marked. On inspection, the respiratory movements of the two sides of the chest were unequal, the right being partially suspended. On percussion, there was dullness from the base to the summit of the right lung, but apparently more marked at the base. On auscultation, very feeble crepitation was heard over the whole side. The physical signs on the left side were nearly normal, with the exception of some mucous rhonchus.

Her case was regarded as one of simple pneumonia, and she was treated with counter-irritants to the chest, and one of the following powders every three hours:—

℞.—Hyd. chlor. mit., gr. xiij;
Pulv. jalapæ,
Potassæ nit., āā gr. xx. M.
Divide in powders No. 4.

On visiting her the next morning I found her somewhat better. The pulse and respiration not so frequent. No pain in the head or limbs; skin moist and warm; bowels freely moved; urine more abundant; cough not so troublesome, and expectoration more free. Discontinued the powders, and ordered the following, in teaspoonful doses, every six hours:—

℞.—Morph. sulph.
Ant. et pot. tart., āā gr. ij;
Aq. font., f℥ij. M.

The above, with blistering of the chest, was continued for seven days, when the pneumonia appeared to give way, and she was treated with iodide of potassium, quinia, and occasional doses of Dover's powder when the cough was trouble-

some. On the twenty-first day from the commencement of the attack, I dismissed the patient as convalescent.

In about four weeks from my last visit, I was requested to call and see this patient again. She had improved but very little. The pulse in the lying posture was 105 per minute, and standing was increased only three beats per minute. This circumstance alone led us to institute a more careful examination of the chest. Dullness on percussion, and prolonged expiratory murmur on auscultation, directly under the right clavicle, pointed the existence of a large tubercular deposit in that region of the lung. Dullness and crepitation had entirely disappeared from the middle and inferior lobe. The only abnormal sound on the left side was sonorous rhonchus, which was not very loud, and quite intermitting in its character.

Having informed her friends of the true nature of her malady, and the probability of its proving fatal, they asked permission to invite Dr. S., a neighboring physician, to meet me in consultation. He came, examined the case, did not agree with me in opinion, considered her case as still one of simple pneumonia, and recommended a rigid antiphlogistic course of treatment, with the most positive assurance that the patient would ultimately recover; from all which I dissented. I, therefore, relinquished the case to his care, with the full assurance that his treatment was to restore the patient to her wonted health.

But Dr. S. was not an auscultator; he knew nothing about the precise nature of the pulmonary lesion, and he was doomed to be disappointed in his prognosis. After attending her for two months without any material improvement, one day, in the absence of the doctor, she was suddenly attacked with hæmoptysis. Her friends becoming alarmed, I was sent for. I found her very weak; the discharge of blood had been very profuse. I prescribed what I thought to be necessary, and promised to call again the next day, which I did, early in the morning. The hemorrhage had ceased; her cough was troublesome; the expectoration abundant and purulent. The physical signs indicated a considerable cavity in the superior lobe of the right lung, with crude tubercular deposits in the left.

From this time she declined very rapidly, and died in about two months from the occurrence of the hæmoptysis.

Comment on this case is hardly necessary. It furnishes us with another illustration of the value of the art of auscultation in diagnosticating the various diseases of the chest. The general symptoms may point out the chest as the part affected, and may give us some clue as to the nature of the malady, but as to the precise location and extent of the lesion, the physical signs are beyond all value, and he who discards them is as unwise as that man who would attempt to navigate the ocean without chart or compass.

PART THIRD.

Pleurisy is another very grave complication of pulmonary tuberculosis. Few patients escape it altogether. Some writers have considered it as one of the principal causes of phthisis. A double pleurisy is regarded by many physicians as a sure precursor of tubercles in the lungs. This to a certain extent is true. In an individual predisposed to phthisis, it may precipitate the attack by debilitating the system and preventing the free expansion of the lungs, but without such proclivity, I doubt very much its influence as an inducing cause of this disorder. Persons sometimes have pleurisy, and a short time after will have pulmonary tuberculosis. Now, in this instance, it is often a question whether the tubercular deposits produced the pleurisy, or the pleurisy the deposits.

The question is one which at present cannot be positively determined. Whenever I meet with cases of this kind, I am in the habit of referring them to a tubercular origin, and treat them accordingly. Intercurrent pleurisy frequently takes place during the progress of phthisis, and is a source of great distress. If it were not for this and the cough, in the great majority of cases phthisis would be quite a painless disease.

I have known several instances where an attack of pleurisy was the first thing to announce the approach of the fell disorder. But, as a general thing, it does not make its appearance until the tubercular disease has made some progress, when, all at once, the patient will be attacked with a sharp, cutting pain in the chest, most commonly in the side, which will resist every act of inspiration, making the act of coughing and deep breathing almost impossible. If we now inspect the chest, we will find the expansive movements of the affected side almost suspended, its dullness more marked on percussion, and if any sound is heard in auscultation, it will be crepitant.

If the disorder is not promptly arrested, and effusion to any considerable amount take place within the pleural membrane, the affected side becomes fuller to the eye, and there is a total absence of resonance on percussion, and no respiratory murmurs are heard on auscultation, the function of the lung appears to be entirely suspended. Such extensive effusion, however, seldom occurs as the consequence of pleurisy in phthisis. The inflamed pleura throws out a little lymph only, there being no serous effusion, and the only traces of pleurisy we find on post mortem is the adhesion which exists in the opposite surfaces of the pleura. Some writers maintain that these pleurisies never result in health when they occur in tubercular lungs. But we cannot see that there is any difference in their healing in this case than in the primitive form of the disease. The mode of healing is by adhesions, as just noticed. And we have frequently seen these adhesions perfectly healthy in lungs that have been well-nigh disorganized by tubercular disease.

From the general history of pleurisy, as it occurs during the progress of phthisis, we are warned not to look upon it lightly. It is a serious complication, and has been known to terminate the case very abruptly, before the tubercular disease has made very much progress in the lungs. Five years since, I had a woman under my care, about 30 years of age, who had a small suppurating cavity in the superior lobe of the left lung. Her symptoms were all favorable, and we looked for a gradual healing of the cavity. She had three children and was able to attend to all of her household duties excepting washing. One day, owing to the sickness of the individual who usually performed this for her, she attempted it herself, but gave out before she was half through. That night she was attacked with acute pleuro-pneumonia, which terminated her life in seven days.

On post mortem the right lung was found to be slightly congested, but otherwise healthy. The superior lobe of the left lung was quite contracted, and exhibited, when laid open, a small, tubercular cavity undergoing the process of repair by the agglutination of its sides by dense cellular substance of new formation. The inferior lobe was completely hepatized, and the pleural membrane contained about sixteen ounces of bright, straw-colored serum. The bronchial mucous membrane was slightly congested, but otherwise healthy. The most careful examination did not reveal a single tubercle in either lung.

I had this patient under my care for more than a year. Her case was considered hopeless when I commenced to attend her. She was confined to bed, was very much emaciated, and had confirmed hectic. By the persevering use of cod-liver oil, iodide of potassium, quinia, iron, porter, and a very nutritious diet, she was able in three months to attend to her household duties, and was gradually improving in health up to the time of the attack of pleuro-pneumonia. If this had not supervened, we would in all probability have had another case of recovery from pulmonary tuberculosis to add to the list which has already been reported, as the result of the present mode of treating this malady.

PART FOURTH.

Emphysema is sometimes associated with pulmonary tuberculosis. It may either precede or succeed it, and render the diagnosis from the physical signs difficult. When the lungs are emphysematous, they are generally dilated and rarified; in tuberculosis, they are contracted and condensed. Hence, in emphysema we have increased resonance on percussion, and on auscultation feeble respiratory murmurs; while in tuberculosis there is dullness on percussion, and very little, if any, diminution of the respiratory murmurs, particularly in the first stage of the disease.

I have met with some cases of this sort, where, from the physical signs, it was impossible to make out a clear diagnosis. Thus, when tubercles are deposited in a part of a lung that is emphysematous, its tendency is to diminish its capacity for air and render its resonance less clear, while they do not materially alter the character of the murmurs. We can, therefore, see how a considerable deposit of tubercle may take place in an emphysematous lung without producing any particular deviation in the normal sound of the chest.

These remarks apply to the first stage of tubercular deposits, and when they are quite limited in extent. When they have passed into the stage of softening, the physical signs will be more marked, and the diagnosis much easier made out. The chief physical sign of the stage of softening is *humid crackling*. This is usually heard at the summit of the lung, without existing elsewhere. If there has been any obscurity about the case,

this will dispel it. Humid crackling at once pronounces the disease tubercular. It does not under any circumstance belong to emphysema. At least so say some of our best auscultators.

Two years since, I met with a case of emphysema that had been pronounced tubercular by three physicians; one of them had given his written opinion to that effect. The patient was a young woman aged 24; she was of the nervo-sanguineous temperament. When I first saw her she had not been well for four months. Complained of weakness, dyspnœa, a troublesome cough, with copious mucous expectoration; pulse 85, and very susceptible to change of posture; respiration 30; digestion good; rests well at night; menses regular, but scanty; no appearance of Thompson's gingival margin; has lost in weight during the past month; never has had any hæmoptysis, or pain in the chest; has no hereditary title to phthisis.

The physical signs were not marked. On inspection, the expansion of the two sides of the chest was nearly equal; the right side appeared more arched than the left. On percussion, it yielded a clear resonance, with the exception of just under the left clavicle, where there was a slight degree of dullness. On auscultation, the respiratory murmurs were very feeble on the right side, and sonorous rhonchus was very loud over the entire bronchi on this side. On the left the auscultatory sounds were nearly normal.

From the physical signs there appeared to be but one circumstance which seemed to indicate tuberculosis, and that was the slight dullness on percussion just under the left clavicle. But this was more apparent than real. It existed by comparison only. The emphysema was confined exclusively to the right lung; hence its resonance was much clearer on percussion than natural, while that of the left was nearly normal.

The case was set down as one of limited emphysema of the right lung from chronic bronchitis. The treatment instituted was blistering the chest. Iodide of potassium, five grains three times a day two hours after eating, and a teaspoonful of the following mixture when the dyspnœa was troublesome:—

℞.—Tinct. ext. Cannabis Indica,
Syrup. Tolu., āā f℥ij;
Sulph. morphiæ, gr. ij. M.

This treatment was closely followed up for four weeks with marked improvement in all the chest symptoms. During this time the blister was re-applied five times, and with very sensible benefit each time. The bronchitis having been subdued by the above treatment, and the emphysema being somewhat troublesome, she was placed upon the use of the following, in tablespoonful doses three times a day:—

℞.—Hyd. chlorid. corrosiv. gr. j;
Syrup sarsaparillæ comp., f℥xvi. M.

By the use of this prescription the emphysema gradually gave way; and up to the present time she has enjoyed her usual health. In cases of emphysema that are curable at all, I have found nothing more useful than minute doses of mercury. I prefer the bichloride to all the other preparations of this mineral. It should be given very cautiously and in very minute doses; and I have generally found that where the emphysema depends upon the remains of inflammatory products that may be left in either the air-cells or smaller bronchi, this agent will gradually and surely produce their absorption, and restore them to their wonted functions. Those cases of emphysema depending upon organic changes in the air-cells and the capillary circulation of the lungs are not only incurable, but incapable of being materially influenced by medical treatment. In this case mercury would do no good, but might be the means of producing much injury, particularly if tubercles were associated with it.

PART FIFTH.

Pneumothorax.—This is not a common complication of pulmonary tuberculosis. In all the cases of this disorder that I have attended, I have only met with it four times. In this disease, it always occurs as the result of a tubercular abscess opening into the pleural cavity. When you open the chest of an individual who has died from this complication, you will commonly find the pleural sac filled with air, serum, and, if the abscess in the lung was large, blood clots and tubercular pus. The lung will be found shrunken and adherent to the chest, and the perforation at some point where the adhesions are not very strong. The opening is usually very small, and sometimes difficult to find. If, however, when found, we introduce a probe into it, it will pass directly to the cavity in the lung; in this cavity we will find the termination of one or more bronchi; thus forming a free communication for the admission of air into the pleural sac.

Sometimes there is more than one perforation, and they seldom if ever occur at the very sum-

mit of the lung, for the adhesions which exist there are so thick and strong that they prevent this; but lower down, opposite the angle of the third and fourth ribs, these perforations are usually found. They are seldom found below this, for tubercular cavities in the inferior lobes of the lungs is a very rare occurrence. The quantity of liquid effusion in the chest is commonly not very great, especially if the perforation has proved rapidly fatal; but this is not always the case; patients have been known to live several months after this accident. One of my patients lived five months, but his sufferings were beyond description; I hope it may never be my lot to witness the like again. In some of these cases of perforation, the tubercular deposits are very limited and the cavities very small, and the accident is found to be as frequent as in those cases where they are more extensive, and the cavities much larger. Cavities situated very near the surface of the lungs are more liable to perforate the pleura than those which are more deeply seated.

At what particular period, during the progress of phthisis, pneumothorax is the most liable to occur, cannot be positively stated; we have no statistics to guide us in the formation of an opinion. We know, however, as a general thing, that it does not usually take place until the pulmonary lesion has made considerable progress. Thus an individual may have all the symptoms and physical signs of the disease for several months, and it may be progressing in the usual way, when all at once the patient is attacked with a sharp pleuritic pain in the side, accompanied with great dyspnœa, and a marked increase in all the febrile symptoms. In other cases the attack may rather resemble a severe shock to the system than an inflammatory invasion. There is no pleuritic pain, but great oppression of the respiration, inability to lie down, and a tendency to syncope, a rapid feeble pulse, with cold, clammy perspiration, pinched countenance, and all the other symptoms of approaching dissolution.

The physical signs of this complication of phthisis are commonly very marked. The side affected is found unusually resonant on percussion; the respiratory murmurs are indistinct and sometimes entirely absent on auscultation. In some very rare cases, the chest is found very much dilated on inspection. These physical signs, occurring under the circumstances described, are quite indicative of the accident in question. But when the patient survives the first shock of the perforation, he will soon have certain other physical signs, which belong to what some writers have been pleased to call HYDRO-PNEUMOTHORAX, such as *metallic tinkling* and *amphoric respiration*.

Metallic tinkling, when very distinct, is a never-failing sign of effusion in the pleural cavity; in this instance it is produced by the bursting of bubbles of air on the surface of the fluid contained in the cavity, when it is but partially filled with air. This sound presents several modications, which are quite indicative of the condition of the parts, and the progressing changes which are likely to occur in them. Thus when the perforation is small or obstructed by its position against the walls of the chest or below the level of the liquid, the tinkling is seldom heard excepting on coughing or taking a full breath, which reaches the cavity and may throw the liquid in bubbles. When the orifice is large and free, the air will pass in and out in ordinary breathing, and will produce in its vicinity a sound like that of blowing into the mouth of a glass bottle; this is the amphoric respiration just named; where we hear this sound, there is seldom so much difficulty in breathing as where the air passes less freely and accumulates in the cavity.

But we have not the space here to give a full description of these sounds. For a minute history of them, and their value as means of diagnosis, we must refer the reader to Skoda on Auscultation and Percussion, or Dr. Austin Flint's excellent work on Physical Exploration and Diagnosis of Diseases affecting the Respiratory Organs. This latter book we would recommend to every physician who may desire to become proficient in the art of percussion and auscultation. This work should have a place in the library of every individual engaged in the general practice of medicine. It is based, to a very considerable extent, upon cases numerically examined, and carries the evidence of careful study and discrimination upon every page. It is a work in our judgment which reflects great credit upon its already distinguished author. It is also a very readable book, which cannot be said of every one that has been published on percussion and auscultation.

Hints and Observations on Military Hygiene, relating to Diet, Dress, Exercise, Exposure, and the best Means of Preventing and Curing Medical and Surgical Diseases in the Army.

By a Hospital Surgeon

Of Philadelphia.

Concluded from page 198.

All wounds and injuries of the meatus auditorius produced by sharp penetrating instruments, puncturing or lacerating the walls of the passage, should be treated by subduing inflammation and allowing the parts to recover with the least possible degree of irritation. If there is much hemorrhage, injections of ice water or solutions of styptics, as the persulphate of iron, etc. should be employed, and great care should be taken to discover the cause, especially if the patient is likely to die from it, as death may be produced by concussion or fracture through the base of the brain, or falls upon the side of the head If from a polypus or fungoid granulations in the meatus, it is soon checked by an astringent wash of oak bark, tannic acid or alum, or one of the salts of iron. Larrey states that if such injuries are accompanied with loss of substance, the attention of the surgeon should be directed to the prevention of the agglutination of the parietes, and the obliteration of the meatus; an instance of such an accident occurred to a soldier, who, during the siege of Paris, had been wounded by a ball in the right ear.

Larrey makes some suggestions, not altogether useless to the military surgeon, on the accidental perforation of the membrana tympani and its results. The rupture of this membrane, although it may be complete and occasioned by a powerful rush of air, or by the shock of some mechanical cause, as the sharp report of a piece of artillery, is not invariably followed by incurable deafness. Larrey has seen several individuals in whom this perforation had actually occurred, and who, nevertheless, after having been deprived for a longer or shorter space of time of their auditory faculties, recovered them entirely and almost as perfectly as they were before the occurrence of the accident.

If, however, inflammation is set up and a discharge takes place, these openings are difficult to close, and this is especially the case if irritating applications have been resorted to in the early stage. The proper treatment for recent injuries is to let them alone; inflammation should be combated with local depletion; mild astringent washes can be employed after the acute symptoms have disappeared.

Larrey states that he could relate several cases corroborating the truth of his assertions, but he will restrict himself to the following fact:—M. Mazelle, one of the captains of the 18th demi-brigade, being the first at the head of a company of grenadiers who scaled the tower of Saint Jean d'Acre, in Syria, where a breach had been made to force a passage into that place, had been thrown down in consequence of the explosion of some Greek fire and other combustible materials, and was pitched into the moat of the tower. Besides other serious injuries which he sustained from so tremendous a fall from a height of upwards of thirty feet, he had both tympana broken, and was in an instant totally deprived of hearing. In this condition he remained for about ten or twelve years; nevertheless, after that period the function of hearing gradually became restored, and he finally recovered that faculty to such a degree that he could resume and perform all the military duties of his particular grade with the same precision as before the accident.

Gunshot and Penetrating Wounds of the Thorax and Pleural Cavity.—Believing that much injury and even death have followed the usual method of treating wounds of the chest, and approving the practice and precepts of a distinguished American Surgeon* in a recent contribution to this journal with cases, I feel I cannot do better for the young military surgeon than to quote his words.

"There cannot be any doubt that the time-honored rule of practice in penetrating wounds of the thorax, viz., the *timely and careful closure of the wound* after the bleeding vessels have been secured, for fear that collapse of the lungs would follow the entrance of air into the pleural sac, is *totally wrong*, and ought to be discarded. It is *not* true that atmospheric air—a medium which is constantly surrounding us and without which our existence would cease—when entering the pleural cavity will *necessarily* produce collapse of the lungs and phlogosis, with its results. Why should its contact with the pleura be more injurious after accidents than with the other serous tunics lining the great cavities and their organs? We puncture the abdominal cavity with impunity; enlarge abdominal openings with protrusion of the intestines, without apprehension of danger; we puncture even the pleura in hydrothorax and empyema, and do not fear a bad result; and yet we are taught to believe that air, entering the chest from wounds inflicted in a healthy state of the system by accidents, and not made for surgical purposes, is extremely hazardous."

Denying the deleterious effects of the contact of air with the pleura, it is yet very doubtful if air, in such a quantity as to cause compression of the lung, can enter an incised wound, considering that the several tissues—skin, cellular tissue, aponeurosis, muscles, and pleura—when traversed by the instrument, are of different degrees of elasticity and density, that the fibers of the two sets of intercostal muscles run in opposite directions, and that the internal and external openings are seldom found exactly opposite to each other. Moreover, after the infliction of

* A. G. Walter, M.D., Pittsburg, Pennsylvania. Med. and Surg. Reporter, June, 1861, p. 216.

penetrating wounds, the patient generally becomes feeble and faint, the respiratory efforts, checked too, by pain, grow consequently weaker, the thorax expanding less and the intercostal spaces collapsing. Under these circumstances atmospheric air cannot enter by a small and oblique opening; but if large and capable of admitting a free current of air, with consequent oppression to the lung, the instinctive efforts of nature to relieve the lung of the compressing agent would be called into action by deep inspirations, and the air thus entering would be expelled again through the wound.

Therefore it is *not the entrance of air* in penetrating wounds of the thorax which constitutes the danger, but hemorrhage, with its effects and consequent inflammation of the thoracic viscera with its results. Though bleeding from a wounded arteria intercostalis may have, either spontaneously or by pressure and ligature, been arrested, yet it cannot be safe to close the wound immediately after, as already effused blood in the pleural cavity has to be removed.

Admitting that small quantities, when extravasated, will be absorbed, it cannot be denied that a large quantity, when filling the sac, and forcing the lung upon itself, will remain unabsorbed, and thus act as a foreign body, inducing empyema, with grave constitutional irritation. The correctness out of the above conclusions being fully borne out by the result of *cases*, we are constrained to adopt, as the *only proper and safe practice* in the management of wounds of the thorax suspected to be penetrating, the following rules :—

"The *first* duty of the surgeon must be to ascertain, by gentle probing, if the wound be penetrating or not. This surely cannot augment the injury, being, moreover, demanded for the purpose of detecting in the track of the wound the presence of a foreign body—a broken knife, sword, bayonet, or bullet, etc. Thus the depth of the wound, and its direction being ascertained, the surgeon is put on his guard to expect internal bleeding. If this be present, the wound should be *left open*, the bleeding arrested by local and general means, and the outward flow of blood encouraged by inclining the body toward the wounded side. The propriety of even enlarging the wound, if it be small, and inward bleeding excessive, cannot be questioned. But if the effusion be moderate, and the wound small, it may be left to itself; if large, however, and the effusion great, part of the aperture should be left open, the rest closed by suture or plaster. The hazardous effects of secondary hemorrhage will thus be prevented by a free opening for the exit of the effused blood. Supporting the chest next by a bandage, in which an opening has been left opposite the wound, and by general and local antiphlogistic means, the patient will then escape the danger which otherwise must follow an injury of such a grave nature."

Wounds of the Heart.—Slight wounds of the heart are curable when inflammation has not been great, as distinct scars have been observed on the pericardium, and on the surface of this organ. Cases have also occurred in which wounds of the heart have healed, in which, some time after the injury, death has taken place, and the bullet has been found in the heart.

We can only determine that the heart is wounded from the direction and depth of the wound.

The symptoms are: a more or less severe pain in the region of the heart; extraordinary restlessness; and insupportable anguish; irregular, intermitting pulse; cold extremities; cold sweat; and frequent faintings.

The following are examples of this severe injury: In a case reported by Featherstone,* of a soldier who slipped, and, falling upon his bayonet, wounded the muscular substance of the left ventricle; lived only forty-nine hours; two quarts of blood were effused into the cavity of the chest; the *pericardium* was nearly filled with blood, and had a puncture, which extended three-quarters of an inch into the muscular substance of the left ventricle, about two inches from its apex. On opening the ventricle, the bayonet was found to have penetrated its cavity, and to have cut through one of the fleshy columns of the mitral valve. A small coagulum was formed at the edge of the wound through the *pericardium*. A second case was reported by Dr. Babbington,† of a marine, who fell from the gangway on his bayonet, which pierced through the heart, besides wounding other *viscera;* he died in less than twenty-four hours. The emphysema, which had commenced early at the upper part of the chest, gradually augmented, and, about three hours before death, had reached the head and face, and, before he died, had extended over the whole body.

The external wound was midway between the spine and linea alba, and the last rib and crest of the ilium; thence the bayonet had passed through the sigmoid flexure of the colon, through the stomach, two inches from the pylorus; thence through the left lobe of the liver, through the center of the tendon of the diaphragm, and the pericardium; then through the heart near the tricuspid valve, through the lungs, and out of the right side of the chest, between the cartilages of the second and third ribs, terminating in the substance of the pectoral muscle. In the belly there was a little bloody serum; in the *pericardium* a small quantity of blood, but in the right pleura two quarts of the latter fluid.

A third case is reported by Fournier,‡ of a soldier, who received a gunshot wound of the chest, and was taken up for dead, on account of the severe bleeding which had occurred. By great care the flow of blood began to diminish on the third day; his strength insensibly increased, sup-

* Med.-Chir. Trans., vol. ii.
† Medical Records and Researches.
‡ Cas Rares, Dict. des Sciences Medicales, pp. 396–7.

puration come on, and many splinters of bone exfoliated. After three months, the wound was healed; the patient's health restored, without other inconvenience than frequent palpitations of the heart, which harassed him for three years. During the following three years they became less troublesome, and he then died of disease unconnected with the heart. On examination, the cicatrix was found very deep, with loss of substance of the fractured rib. The ball was found lodged in the right ventricle of the heart, near its tip, enfolded, in a great measure, in the *pericardium*, and resting on the *septum medium*.

Gunshot Wounds of the Abdomen.—"In a penetrating wound of the abdomen," says Hennen, "whether by gunshot or by cutting instrument, if no protrusion of intestines takes place, and this, it must be observed, in musket or pistol wounds rarely occurs, the lancet, with its powerful concomitants, veratrum viride, abstinence, and rest, particularly in the supine posture, are our chief dependence. Great pain and tension, which usually accompany the wounds, must be relieved by leeches to the abdomen, if they can be procured, by the topical application of fomentations, and the warm bath; and if any internal medicine is given, as a purgative, it must, for obvious reasons, be of the mildest nature. The removal of the ingesta, as a source of irritation, is best effected by frequently repeated oleaginous enemata; indeed, on the first infliction of a wound of the abdomen, the contents of the intestinal canal and stomach are generally evacuated spontaneously by vomiting, and soon followed by stools, which are sometimes tinged with blood; their accumulation must be guarded against by a rigorous diet; for, to the general state of fullness of the vessels induced by food, is added its local and mechanical stimulus, in the undigested form."

Further treatment will be to close the wound with silver wire or pins, apply compresses soaked in tepid water, and a flannel bandage; or occlude the wound from the air by collodion. Look carefully to the position, cause him to lay upon his back, with his limbs drawn up. If pus forms, do not wait for nature to point, open as soon as fluctuation is discovered. Warn the patient *against* hernia, and, if necessary, apply a proper truss.

Penetration of Wounds of the Stomach, by Stab from Knife, Sword, or Bayonet.—The usual symptoms are vomiting of food, then blood, with fixed pain in the region of the stomach, with anxiety, depression, and all the other symptoms accompanying penetrating wounds of the abdomen. If the external wound be large, a part of the stomach may protrude through it.

Prognosis.—Always very dangerous, from extravasation into the abdomen, and inflammation. Wounds in the middle are considered less dangerous than those in its curvatures.

Treatment.—Do not enlarge or probe the wound. There is little danger of substances escaping; plasma is effused, which glues the edges together. Hernia of the mucous coat takes place, and fills the orifice. Let nature alone, give no food, medicine, or drink; if thirsty, permit the use of a little ice, as it is absorbed as fast as melted. Nourish him by injections of broth, etc., by the rectum. If severe spasmodic symptoms be present, give opium in enemata. Apply lint, dipped in cold water, on the wound; if the wounded part of the stomach protrude, a silk thread may be drawn through both edges, and the ends be allowed to hang out. In a case treated by Travers, he tied a ligature around the wound of the protruded stomach, and the patient recovered. If inflammation should arise, treat it actively. If the stomach is simply strangulated in the wound, dilate the latter, rather than handle the stomach. Inclose the edges of the stomach, if wounded, and the integument in the suture. After forty-eight hours, the loop may be withdrawn, because adhesion to the peritoneum has taken place.

If a fistula remain, the opening must be kept closed by compressing apparatus.

Penetrating Wounds of the Intestines.—The intestines may be wounded by sword, bayonet, or gunshot.

In slight stabs, the opening of the wound is always closed by the protrusion of the inner coat; if longitudinal, the edges of the wound always turn out, and, from the contraction of the longitudinal and transverse fibers of the gut, the wound assumes an oblong form. The symptoms of wounds of the intestinal canal are vomiting incessantly, sometimes of blood, and even of feculent matter; fetid air and feculent matter escape from the wound; if the wounded gut protrude through the opening, it is found collapsed, and the wound in it may be seen. If the wounded intestines be in the abdomen, these symptoms often appear, and the injury of the intestine can only be presumed, from the depth to which the instrument has penetrated. If the wound of the intestine is small, pucker up the opening with a pair of forceps, then tie a ligature around the base, cut off the end, and return into the abdomen; plasma is effused, and the ligature cuts its way, and escapes into the cavity of the intestines. Treat small sloughs in the same manner. If the opening be oblique or transverse, and half an inch long, use the glover's suture, bringing the serous coats in contact, that adhesion may take place; introduce the suture a little distance from the edge, and let an assistant depress then, when the suture is tied; then cut off both ends, and return into the abdomen. The ligature escapes in the same manner as before. In the wound in the abdomen, if from a sword, and long, take care to unite it by pins, passing these carefully through the peritoneum, with a small gum-elastic ring, cut off from a tube, passed over the protruding ends.

"Larrey carefully unites wounds with the glover's stitch, folds them in opposite directions,

and brings them together with two threads of different colors."

"Hennen says that he has had only two cases of wounds of the intestine, one with a shoemaker's knife, and the other with a sabre, and he practiced the mode by a single stitch in the abdominal parietes, and then closed the wound: * * * cutting off both ends of the ligature, and a perfect cure was effected in a few days in both cases."

The following remarkable instance of a ball, which penetrated the abdomen and intestines, and, after a time, passed by the natural passage, is from Hennen:—

Case.—Sergeant P. M. received a ball in the belly on the evening of the 18th of June, 1815, which struck him "upon the right side, about an inch below the navel, and three fingers' breadth to one side. Scarcely a tinge of blood followed the wound.

"He did not fall, but walked about fifty yards to the rear, from whence, in half an hour, he was carried to a large barn in the village, where he remained for three days before he was conveyed to a hospital at Brussels. During this period he was bled three times, *ad deliquium*. The first vein was opened about twenty-four hours after the receipt of the wound. On his arrival at Brussels, his principal complaint was incessant straining to stool, for which he received daily clysters. On the sixth day from the receipt of the wound, immediately after an enema, he had an urgent call to the close-stool, when he passed a small-sized musket-ball, enveloped in mucus, and unaltered in shape, except a small groove indented in it, probably from cutting along the bayonet or ramrod of the piece from which it was fired.

"The wound was perfectly healed on the 26th of August following, without any ill accident or uncommon occurrence from the time of receiving it, except that, during the course of the first night, he was sensible of a sort of watery oozing that moistened the linen placed on his wound, particularly whenever he drank, which he frequently did. This circumstance he was never afterward sensible of. He joined his corps at Paris, but had not been more than ten weeks there, when severe pain again arose in the bowels; some bits of cloth were passed by stools, an abscess formed externally; and every symptom threatened approaching *peritonitis*, which was relieved by active means, under the charge of Staff-Surgeon Dease. In the following year he was seen: his general health was good, but if he indulged in a full meal, he felt severe pain in the part."

Gunshot Wounds of the Liver.—Severe injury of the liver, from gunshot and penetrating wounds, is to be suspected from their depth and direction. A large amount of blood of a deep, black color flows, frequently mixed with bile; there is pain of a deep-seated character in the right hypochondrium, which extends to the right shoulder.

The prognosis depends upon the severity of the wound; if deep seated, and tearing the large vessels of the liver, extravasation of blood and bile occurs into the cavity of the abdomen, which usually terminates fatally. If the wound is only superficial, by causing adhesion between it and the peritoneum the patient may be saved.

Treatment should be strictly antiphlogistic, placing the patient on his right side, so that all discharges will flow out. To check the bleeding, employ ice and leeches to the rectum. If the wound suppurates, apply poultices, with a supporting bandage to the abdomen.

Wounds of the Gall-Bladder.—These are considered possible without injury to the liver; they are characterized by extravasation of bile into the cavity of the abdomen, and are considered fatal. Gooch quotes from the *Philosophical Transactions* the case of an officer, who received a wound in the inferior part of the gall-bladder without the adjacent parts suffering any considerable injury.

The *abdomen* was immediately distended, as if the patient had been afflicted with *ascites* or *tympanitis*, which continued till his death, about a week after receiving the wound. His bowels remained obstinately constipated, purges and clysters having no effect; and though considerable doses of opiates were given, they procured little or no ease. The external appearance of the wound was pale, crude, and flaccid. On the fifth day complained of nausea, and had slight hiccough; his pulse was strong, equal, and slow, till the day before he died, and then intermitted a little. His senses were perfect till death.

Wounds of the Spleen.—Wounds of the spleen are almost always fatal, owing to the large amount of blood lost, and its acting as a foreign body in the abdomen; yet there are instances on record, where patients have recovered from very severe wounds, in which the spleen has protruded through a wound in the abdomen, and has been partially removed, and yet the patient did well. The well-known instance of the soldier who was found, after the battle of Dettingen, with his spleen protruding and covered with dirt, is a case in point. The surgeon not liking to return it, cut it off; and yet the patient recovered.

Also the interesting case, reported* by W. B. Powell, M.D., of Kentucky, of a man, aged thirty years, who was stabbed, at night, in the left side, about four inches anterior to the spine, by a knife or large dirk; two inches of the spleen protruded, and being prevented from reduction on account of a slit in the protruded extremity one inch in length, which induced him to believe that such an act would endanger the patient's life from internal hemorrhage, though but little blood followed in consequence of the stricture of the lips of the wound. On the following morning the spleen was in a state of high inflammation; he,

* Amer. Jour. Med. Sci., vol. i. p. 481, 1827.

in consultation with Dr. Bennett, of Newport, Ky., amputated the protruding part, first applying a ligature from a slip of a tendon. He then attempted to make a perfect reduction of the spleen; but found it impracticable, without the use of injurious force, to get the amputated extremity of the spleen below the diaphragm, because of the great contraction of the muscle; it was therefore left to nature, by closing the external wound. He took a pound and a half of blood from his arm; put him in bed, prescribing light diet, and an absence from company. On the third day his pulse, skin, etc. indicated an unusual degree of constitutional excitement, which was subdued by antimonii et potassæ tart., with sodæ carbonatis, in small doses, and bread and milk poultices to the wound. On the fourth day, healthy pus was discharged from the wound for three days; and then it was discharged internally, followed by symptoms of peritoneal inflammation, which yielded to the administration of the above-named medicines, with warm fomentations and evaporating lotions to the abdomen. After this, he continued to improve; and on the fourteenth day was discharged, though the wound was not entirely cicatrized. Dr. Powell saw him nine months after, when he informed him that the wound was perfectly healed, and that he enjoyed excellent health.

Gunshot and Penetrating Wounds of the Bladder.—In naval and military operations the bladder is wounded, more especially when full and raised out of the pelvis. These wounds are more or less dangerous, depending upon the wounding of the *peritoneum* or the *infiltration of urine* into the cellular tissue.

The treatment is to leave the wound open, introducing a large catheter into it that the urine may be carried off. Place your patient on a strictly antiphlogistic treatment, with as little fluid as possible, and let the wound heal by granulations, or if very extensive, close a part by sutures, with light dressings.

According to "South,"* in the museum at St. Thomas's Hospital is the ball which was received by Colonel A., while in action before Alexandria; it was a grape-shot, which, passing through the right ischiatic notch, taking a circuitous route through the pelvis without wounding any large vessel or nerve, and came out under Poupart's ligament on the left side, and was found in his pantaloons. In its passage, the ball had wounded both the *rectum and bladder;* and he was removed on board of ship under the care of Mr. Este, who found him sinking very fast. He, however, constantly applied poultices, as hot as could be borne, and gave him bark, camphor, ammonia, etc., with brandy and bottled porter, by which latter he was much refreshed. The physician-general was called in consultation, who stated that recovery was impossible—the wound being gangrenous, discharged extremely, and was intolerably offensive. The feces and urine passed through the lower wound, but there was no natural evacuation by the *rectum* or *urethra.* After some few days a favorable change in the wounds commenced: the sloughs separated, healthy pus was discharged, granulations were produced, and the wounds healed. The feces at length, and also the urine, passed by their natural channels. When able to use crutches, he was sent in a convalescent state to Malta.

Stricture of the rectum ensued, of which he was cured by Sir A. Cooper, and some of the gold-lace of his uniform came away.

Case 2.—M. M., aged forty years, a healthy sailor, was admitted into St. Thomas's Hospital under the care of the celebrated surgeon Cline the elder

Feb. 20, 1812. "It appears that in July, 1811, during an attempt to cut out a schooner, he received a shot in the right hip; the ball entered the *dorsum* ilii, obliquely downward, within about two and a half inches of the sacrum, and an inch above the ischiatic notch, while he was sitting pulling an oar, which he continued to do for some time after. The wound bled profusely, and in a few minutes after he had great inclination to make water, which was done with great difficulty and pain, only coming away by drops. On the following day he was carried to a hospital at Cadiz, where for three or four days he continued to discharge his urine only in drops, and accompanied with burning pain, when retention of urine took place which remained for four days, occasionally being relieved by the catheter; at the end of which time the cause was explained, by a piece of shirting and of his trowsers having made their way up to the orifice of the urethra, closely rolled up to about the size of a goose-quill and two inches in length.

"Upon extracting this, by means of a pair of dressing forceps, the retention of urine was completely removed. During the time of retention, and then only, did urine mixed with bloody discharge pass out at the wound of the ilium. For several days after the extraction of the wadding, there was a discharge from the urethra of thick, ropy mucus mixed with blood.

"The urine passed freely, but with heat and pain referred to the end of the penis, and a frequent desire to void urine. These symptoms continued, except that latterly there was difficulty in passing his water. The wound had healed about a month previous to his admission into St. Thomas's, having a stiffness and pain in the motions of the limb. The bullet was found encysted on the left side of the bladder, much flattened, and having a small portion of bone adhering to it. He recovered very quickly after the operation."

In concluding this series of papers on military surgery, let me hope that my efforts to contribute to the knowledge of the volunteer surgeon engaged in the cause of his country, may not have been entirely fruitless. Having commenced their publication prior to the appearance of any of the now numerous and valuable works on the subject,

---

Chelius System of Surgery.

I felt that a void existed, which might better have been filled by others. Many points have been omitted, being regarded merely as of theoretical value; yet the author has received gratifying evidence that his labors have been appreciated by those engaged in the field and hospitals, endeavoring to relieve the sufferings of the brave men who are fighting in the defense of their glorious country.

Illustrations of Hospital Practice.

PHILADELPHIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. Da Costa.

January 18, 1862.

ANÆMIA—BLOOD DIS ASE.

The above case (see last number, p. 388) proved fatal, and the *post-mortem* appearances were exhibited and explained to the class The diagnosis of enlargement of the liver, particularly its left lobe, and of congestion of the lungs, and bronchitis, as deduced by the dry râles heard over almost the entire surface during life, is confirmed. There is also a slightly congested condition of the stomach which is common to those who drink intoxicating liquors to excess. The impulse of the heart, we told you, was feeble. The cause is now apparent. There is a tendency to fatty degeneration, and some effusion was found in the pericardium. In addition, we find the kidney to be fatty. A fatty liver in drunkards is common. I have been struck with the frequency of fatty kidney in those dying from drunkenness in this house. Returning then to the liver, we find in it a morbid growth which is evidently cancerous, and must have been of long standing. The history of the case seems to contradict this, for we were told she had been well up to two weeks ago; but the liver is before you. The cancerous nature of the affection of the liver cannot be disputed; and it was so entirely masked by the acute symptoms which made themselves prominent, as to be revealed only by the *post mortem*. This is the second case of this kind which has come under my notice. In the other case, supposed epithelioma, the patient, after an operation for external tumor, complained of a pain and swelling in the region of the liver; had bronchial symptoms, as in this case, and the *post mortem* revealed a similar condition of the liver; and these facts show that in a certain class of cancerous affections, the chronic form may pre-exist without any marked symptoms to denote it, at least as far as the patient is aware, and suddenly cancerous masses develop themselves with signs of acute congestion. But suppose the previous history of this case had revealed chronic disease, are there any symptoms by which cancer could have been diagnosticated? So far as primary cancer of the liver is concerned, the diagnosis is quite uncertain. In regard to the chronic form, enlargement of glands of the neck and those near Poupart's ligament have been regarded as pathognomonic, but they are not entirely so, for they are sometimes absent. The tenderness on pressure, which is always present, and the irregular surface of the liver, are more nearly diagnostic of cancer. You observe upon this specimen certain round, whitish, nodular spots forming morbid deposits in the substance of the organ, but not at its edges. Morbid deposits in the liver are most likely to be cancer. As we cut into them, we find a peculiar yellow appearance, and observe the breaking down and softening of the mass, some portions having a peculiar fatty appearance.

DYSENTERY—DIARRHŒA.

J. T., aged 44, painter, always previously in good health, was taken five months ago with diarrhœa; came on gradually while working at his trade; had eight to ten discharges each day, attended with tenesmus, and with blood mixed with slime and mucus; was admitted to hospital four months ago; his countenance now is pale, anæmic; tongue pale, clean; red globules of blood evidently greatly deficient. Pressure upon abdomen produces no pain, but there is slight tenderness over the transverse and ascending colon. His appetite is impaired. His treatment has been injections of acetate of lead in solution, and he has also taken it internally. This is a case of chronic diarrhœa with dysentery. In contrast with this case I present you another. J. F., aged 60, has diarrhœa eight weeks; discharges very frequent at first, could hardly count them; now, some six during the day; no blood; slight griping; no mucus in discharge; tongue clean, red. Observe the contrast! No pain or tenderness in the epigastrium; appetite good; digestion good; no tenderness of abdomen; liver not enlarged in either case. Treatment the same as the other. Here you have a case of pure diarrhœa. And these are the types of an epidemic which is prevailing to a large extent in this city, the pathology of which, in my opinion, is a localized congestion of the whole tract of the intestinal canal, the glands scattered along its length not pouring forth their normal secretions.

In one of these cases before you, such congestion I think exists, and should be treated by counter-irritation; and that irritant may be turpentine and acetic acid, each one part, rubbed over the whole intestinal canal. In addition, let him take the following mixture three times a day:—

℞.—Plumbi acetatis, gr. ij;
Ipecacuanhæ, gr. ss;
Opii, gr. ¼. M.

His diet should be nourishing—that which is easily digestible.

In the other case there is no congestion, and no local treatment is required. He may take the

same mixture, only giving the acetate in one and a half grain doses instead of two grains.

Ipecacuanha is an excellent remedy in these affections. It acts as an alterant to the mucous surface.

SEVERAL CASES OF DROPSY.

January 22*d*, 1862.

J. R., aged fifty-two, from Delaware, bricklayer for twenty-five years, married, has been sick over one year; came on, as he thinks, from a heavy cold in his chest, which was followed by night-sweats during the winter following; has lost flesh greatly. A few months ago, felt something give way in his left side while lifting a heavy load; a stinging sensation followed the injury, and very soon his limbs began to swell. His tongue is slightly coated in the center; he has great shortness of breath; his eye has a slight yellow tinge; his pulse is feeble; his abdomen is enormously swollen, encroaching upon and interfering with the movements of the diaphragm.

Now, what is the nature of this swelling? It might be a tumor; yet a tumor does not exhibit the uniform extensive swelling observed here. A tumor is generally upon one side of the abdomen, and not extended over its whole surface. But we here have marked dullness upon percussion everywhere, except for two or three inches above the umbilicus, where it is tympanitic; yet percussion alone gives no test of the presence of fluid; a more certain method of diagnosis is succussion, which is performed by placing the fingers of the left hand upon the left side of the abdomen, and striking the opposite side sharply with the fingers of the right. This causes the fluid, if present, to vibrate against the fingers of the left. Tested in this manner, we find this enormous enlargement of the abdomen in this case to be occasioned by the accumulation of fluid within its walls.

On what does this dropsy depend? If we percuss the lungs, we find them clear, both anteriorly and posteriorly; if we examine them by auscultation, we find the respiratory murmur normal on the left side; on the right posteriorly, harsh. There is no disease within the chest sufficient to account for the dropsy. The heart sounds are feeble; impulse of moderate strength; the organ not enlarged. In nearly all cases of dropsy, either disease of the heart, kidneys, liver, or blood will be found present. Having thus excluded the heart as the organ at fault, we must seek for the cause in the liver or kidneys. There is no enlargement of the liver, nor of the spleen. Turning now to the kidney, we examine its secretion; the urine is high colored, specific gravity 1031. Testing it by heat and nitric acid, we find no albumen. You will observe I say heat *and* nitric acid; for by heat a deposit may be thrown down, which may be albumen, or it may be something else; and so by nitric acid alone, the deposit may or not be albumen. The correct method is, that by both heat and the acid. Applying this test, we find no albuminous deposit. Still the kidney may be affected; for the microscope reveals tube casts and some organic deposits in the renal secretion. There is evidently a morbid process going on in both the liver and kidneys, though the urine reveals but a slight amount of disease in the latter.

In the treatment of dropsy, the kidneys and skin should be made use of, as the medium through which the accumulated fluid may be eliminated from the body. The warm and vapor baths, diuretics, as uva ursi, benzoate of ammonia, are appropriate remedies. When kidneys are but slightly diseased, and when they are healthy, purgatives may be used, as croton oil, elaterium, gamboge. Oftentimes great relief is experienced from a free evacuation of the bowels; but purgatives should not be employed too frequently or constantly. Diuretics are preferable to purgatives in most cases; yet all remedies are sometimes of no avail, and the evacuation of the fluid by tapping is required.

In this case, give one-twelfth of a grain of elaterium as a purgative; also twenty grains of acetate of potash, dissolved in water, three times a day, as a diuretic.

In contrast with the foregoing case, the lecturer exhibited to the class a case of *pendulous abdomen*, by which he illustrated more clearly the points of differential diagnosis. The former gave a dull sound on percussion, the latter is everywhere tympanitic. The latter came on gradually, and gave no suffering; the former was quite the reverse. The latter was a relaxation of the abdominal walls, and an accumulation of fat; in the former, the walls were distended by the presence of a fluid.

GENERAL DROPSY—BRIGHT'S DISEASE.

The next case was that of George W., aged eighteen, a native of New York; admitted to Children's Asylum at the age of sixteen; has always been in delicate health; had measles, scarlatina, and small-pox; four years ago had ophthalmia of right eye, which destroyed the sight. While in Children's Asylum, suffered severely from asthma and œdema of the lower extremities, interfering with locomotion. His countenance is extremely pale, and has a waxy hue; his lungs, on percussion, are clear; heart frequent in action, and impulse extends over several intercostal spaces; no blowing sound; second sound very distinct, indicating that it is enlarged and thinned in its walls. Over both lungs, there is a fine crepitation, precisely such as occurs in the commencement of a pneumonia. How will you distinguish it from the condition of the lungs in this case, which is that of œdema? By the fact that in the latter the crepitation is heard on both sides; in pneumonia, a deposit of soft lymph is diffused in the cells of one side; in œdema it is a transudation of serum in both lungs. Then, again, the sputum of œdema is ordinary, possessed of no peculiar characteristics, or is frothy: in pneumonia it is rusty colored, and attended by symptoms of hepatization or consolidation of the lungs. This diagnosis is vastly im-

portant with reference to the treatment to be pursued.

But, pursuing our investigation further, we notice, in addition to the waxy hue, a puffiness of the whole face, and a swelling of the eyelids. On examining the renal secretion by acid, we find a dense, white deposit, which will not disappear upon the application of heat. The albumen of the urine is fully equal to 60 per cent. of the fluid. In some cases of so-called Bright's disease, however, we may have a slight quantity of albumen, which may not be persistent, entirely disappearing at one time, and again reappearing for a short period; a slight leakage of albumen from the blood, as it were, which soon ceases. Not so in this case; we have here also other evidence. Examining the urine by the microscope, we find broad tube casts, covered with urates and with broken-down epithelium. The urine is pale in color, specific gavity 1018. We therefore infer that we have in this case Bright's disease, with œdema of the lung and general dropsy. Œdema of the lung occurs frequently in this disease, and forms one of its worst features. Dyspnœa must result, for the blood cannot be well aerated.

SURGICAL CLINIC.

Service of Prof. Gross.

January 22, 1862.

INTRA-CAPSULAR FRACTURE OF THE FEMUR.

This was the case of a female who gives her age at 110, and says she was about 50 when the battle of Waterloo occurred. As she was walking she slipped upon the pavement, striking her right hip upon the curbstone; violent pain immediately followed, and she was unable to rise or walk. You will observe the appearance of the limb; it is everted, resting upon its outer surface in its entire length; it is shorter than its fellow by nearly two inches; there is tumefaction and slight discoloration about the hip; the heel is turned inward and drawn upward, and occupies a position upon the tendo Achillis above the heel; there is also preternatural mobility on manipulation; the patient has no power to lift the limb or to control its motions; by extension and counter-extension, it is restored to its proper position and length; distinct crepitation is heard at the hip-joint; the trochanter is remarkably prominent, and as the limb is rotated, that protuberance moves over a larger space than in a dislocation. From all these symptoms, which contradistinguish it from a dislocation in any direction, we infer that we have a fracture of the neck of the femur within the capsule. The extreme age of the patient and the well-understood fact that the bones of aged people are exceedingly brittle from imperfect nutrition, tend to confirm the diagnosis. Now what is the appropriate treatment in such cases? Bony union cannot be expected; if there be any union at all it will be fibrous. The proper position for such a limb is the straight one, and for the patient to be confined to the bed. But in this case this treatment is inapplicable; union here is improbable, and confinement would necessarily produce great suffering. Place the limb upon an inclined plane for a fortnight; give her good nourishing diet—stimulants if necessary. Why no union here? The lymph will be thrown out in small quantities, from the fact that the round ligament is the only medium through which nutrition is now conveyed to the bone, and then again the fractured extremities can with difficulty be kept in apposition.

Medical Societies.

CLERMONT COUNTY (OHIO) MEDICAL SOCIETY.

We find an interesting report of this Society's proceedings at their meeting at Batavia, October 16th, in the *Lancet and Observer*, from which we make the following extracts:—

"Dr. Coombs read a lengthy production on dropsy of the amnion, evincing much research, and also reported several cases of poisoning by mushrooms.

"Dr. Mullen reported a case of supposed extra-uterine pregnancy of two years' duration. The woman's health had continued good.

"Dr. McLain reported a case of uterine hemorrhage of seven weeks' continuance, at the expiration of which time the woman was delivered of a living child.

"On motion, the rules were suspended, and, by a unanimous vote, Dr. I. McMillen was expelled from the society for drunkenness.

"Dr. Crew reported a case of prolapsus ani, supposed to result from stone in the bladder.

"Dr. Rogers related the following circumstance, showing the tendency of loss of blood to destroy the susceptibility of the system to the narcotic effects of opium. 'A lady having nearly expired from flooding, he called for the wine-bottle. A bottle of laudanum was handed him instead, but before he detected the mistake he gave her nearly an ounce at a draught. The patient revived speedily, manifesting no other effects of the laudanum.'

"Dr. Mendenhall reported the following case: 'On the 22d of May last I was called to see Mrs. C., in labor. She was of small stature, and had borne three or four children previously. On examination, I found a remarkable obliquity of the uterus forward; the fundus hanging within close proximity to the knees; the os was drawn up above the symphysis pubis, and dilated. I immediately gave her a large dose of castor oil, and had her placed horizontally on her back, from which position she was not allowed to move. During pains I used strong pressure upward on the fundus. In about eight hours the child was born, when excessive flooding immediately commenced. Disposing of the child as soon as pos-

sible, I made an examination, and found the placenta adherent. The hemorrhage continuing profusely, I lost no time in introducing my hand into the womb. When it entered I found quite a large cavity, the walls of the lower portion of the womb being flaccid. Above this cavity the womb was contracted tightly around the cord, and a small portion of detached placenta, which was hanging loosely below the contraction. I kept my hand in the womb about five minutes, when no alteration taking place in its condition, and the hemorrhage continuing, I withdrew my hand for the purpose of using other means. I gave her one-third grain morphine, and made cold applications to the hypogastrium. Some fifteen minutes from this time I introduced my hand again, but still found the hour-glass contraction. The woman's strength was now rapidly failing. I gave her hot toddy, and repeated it every few minutes, with one-eighth grain morphine every half hour after the first dose. Two hours after delivery she had taken half a pint of whisky, when the power of deglutition failed, she was unconscious, and pulseless, her breathing hurried, surface cold as a corpse, and bedewed with sweat. At this stage of the case I found the placenta in the vagina. All that could be done now was to make warm applications to the surface, which was done as effectually as possible. After she had remained pulseless and cold as clay for four hours, I noticed some returning natural warmth about the chest and upper part of the arms. An hour later, the pulse was just perceptible at the wrist, when I left.

"'On my return, ten hours later, I was informed that consciousness did not return for four or five hours after I left, but the patient was now comfortable, and done well after this.

"'Several points of interest present themselves in this case, but the most remarkable feature is that of the patient's recovery after the great loss of blood sustained, and the effects produced by it. Her safety was, no doubt, mainly due to the morphine. Opiates are the most direct and permanent stimulants of the brain, and through the effect of the morphine on the brain the heart's action, though feeble, was kept up until the recuperative powers of the system had reproduced enough blood to maintain life. I did not, however, regard the whisky and external application of warmth as unimportant adjuvants.'"

EATON (OHIO) MEDICAL SOCIETY.

The semi-annual meeting of this Society was held on the 10th of October. The President, Dr. W. Lindsay, delivered his inaugural address, in which he called the attention of the Society to the necessity of self-protection and self-improvement.

"The object of the Eaton Medical Society is the diffusion of knowledge among its members—knowledge obtained by the advancement and review of medical science. The necessity for such an organization is admitted by all intelligent physicians, as a recital of knowledge obtained by investigation can, in this way, be communicated more efficiently and more rapidly than by any other means.

"Article third of the society's constitution reads thus: 'Any regular physician, in good standing, may become a member of this society, by a vote of three-fourths of its members present.' Who, then, is a regular physician? One who has received a regular medical education. That, and that alone, furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honors of his profession.

"The following resolutions, presented by the secretary, were unanimously passed:—

"1. '*Resolved*, That it is as necessary for a physician to take one or more medical journals, and to belong to a medical society, in order to be in good standing, as it was for him to study medicine before he could be licensed to practice.

"2. '*Resolved*, That, as the regular medical profession has no secret medicine, no man can be in good standing who pretends to have a secret medicine. If a medicine is good, any concealment regarding it is inconsistent with professional liberality; and if the compound will not stand scientific investigation, then the use of it implies disgraceful ignorance and fraudulent avarice.

"3. '*Resolved*, That this society sets the seal of its disapprobation, by a unanimous vote, on any practitioner of medicine who pretends to have a secret infallible medicine for diphtheria or asthma.'"

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

HOW CHLOROFORM PRODUCES DEATH.

In the *Lancet and Observer* for November, Dr. H. Culbertson, of Zanesville, Ohio, has an able and interesting article under the above heading. Sixteen experiments were made upon animals; chloroform was administered to dogs and pigs until death was produced, and an examination of the bodies made with reference to the establishment of certain points of inquiry. We have not the space to give a synopsis of the experiments or of the results; we will simply give Dr. Culbertson's own conclusions:—

"Conclusion 1st. That from the effect of chloroform by inhalation, the lungs will cease to act first, and the heart last.

"2d. That rapid chloroforming does not always produce congestion of the lungs.

"3d. That when congestion of the lungs does result, it is sometimes greater in one than in the other, and often present in one and absent in the other.

"4th. That collapsing of the lungs in these cases occurred in every instance inversely as congestion was more or less marked.

"5th. That we can offer no satisfactory explanation why chloroform should sometimes produce congestion of the lungs and heart, and again paralysis of these organs, save that it may result from being too profusely or rapidly given. Consequently, to obtain the safest effect of the agent, it should be slowly exhibited, and a large proportional supply of fresh air admitted, that respiration may be unarrested and insensibility gradually induced, by the agent passing through the circulation and reaching the sensorium.

"6th. That the chloroform enters the circulation and pursues the natural course of that system, and therefore it cannot travel from the lungs to the right auricle, but must course from the right heart to the lungs after it has passed through the systemic circulation.

"7th. If the anæsthetic is applied to the lungs, there is either no congestion of these organs, and much dilatation of the heart, or congested lungs and heart.

"8th. It is immaterial whether the paralyzing agent be applied locally to the medulla, or to the lungs. In the latter case a longer time will be required to kill, provided the case is purely of the paralyzing character, and less, if congestion of the lungs result.

"9th. That the more potent the paralyzing agent is upon the medulla, the sooner does death ensue, and the less is the heart dilated and lungs congested.

"10th. That chloroform may produce a general excitement by being applied to the nervous radicles of the nose, throat, and lungs, and also induce local anæsthesia wherever applied. Yet, to produce insensibility, it must reach the sensorium by circulation, and to cause death by paralysis it must locally impress the medulla oblongata. It matters not how much benumbed the afferent nervous radicle of the endocardium by the local action of the anæsthetic, the medulla will continue to be excited by the blood circulating in it, and thus motor agency be sent down to the heart, until the medulla too is paralyzed.

"Again, the heart is mostly supplied from the sympathetic; consequently, could the restorative pass to the medulla, but little effect would reach the heart through the few cardiac motor branches of the pneumogastric. From such considerations as these, it would seem that restoration is probably impossible after the heart has ceased to beat.

"It may be that in our experiments we have not properly used the galvanism, and that an exciting fluid could be passed through one of the internal carotids direct to the medulla, and thus stimulate the latter to motiferous action; but this remains to be investigated.

"16th. That congestion of the brain in these cases seems to be a rare result."

In reference to the experiments and conclusions of Mr. Sansom, as published in the London *Lancet*, Dr. Culbertson makes eight other experiments. From these he derives the following conclusions:—

"1st. That chloroform cannot be applied either directly to the brain, or through the medium of the circulation, to an amount proportionate to the powers and idiosyncrasies of the individual, without producing *unconsciousness*.

"2d. That chloroform, to induce insensibility, must enter the circulation and locally impress the sensorium.

"3d. That anæsthesia may be aided by the presence of carbonaceous compounds in the blood, but that this is subsidiary to the presence of the chloroform in the blood acting upon the nervous centers.

"4th. That chloroform, diluted as it is by the serum when it enters the blood at the lungs, and onward in its course, cannot produce any change in the functional action of the red globules.

"5th. That the red globules may be corrugated and deformed by the action of undiluted chloroform out of the vessels, but not when diluted.

"6th. That aggregation of the red corpuscles is not a peculiar effect of chloroform on these, but arises from approaching stasis within, and from a well-known aggregative tendency when without the vessels.

"7th That chloroform first induces excitement and contraction of the vascular system, and then sedation and dilatation, and ultimately stasis."

In reading Dr. Culbertson's paper, a few thoughts have occurred to our mind that perhaps are not sufficiently matured for expression, without exposing us to criticism. Asking our reader's indulgence, we propose a thought or two not brought out in the paper. Is it not possible that deaths from chloroform are partially the results of causes that may be denominated mechanical? That chloroform first morbidly impresses the nervous centers is doubtless correct; but this impression upon the nerve centers must modify the nervous influence conveyed to the various structures and organs of the body, and thus modify function and disarrange organic action, thereby disarranging the machinery of life in such a manner as to bring the whole to a stand.

In the experiments made, the heart was unnaturally and even greatly distended, particularly the right side. The right side receives the venous blood from the system, and sends it to the lungs

for its requisite changes. This condition of the heart shows one of two things—either the force of the heart's action is diminished by partial paralysis, or else the resistance to be overcome is greater than usual. The heart is the last organ to cease its motion; though this fact does not prove the absence of diminished force, yet it is presumptive evidence against heart paralysis. The lungs were mostly found collapsed, and never engorged with blood. This fact would seem to show unusual resistance in that direction. We would here inquire if any experimenter with chloroform has observed an unnatural contraction of the arteries and veins, particularly their smaller ramifications? Should this condition be found to be a fact, as the result of chloroform inhalation, it would account for many other conditions present, such as engorgement with blood the central organs, as the stomach, liver, spleen, membranes of the brain, etc., as well as for the distention of the heart with retained blood, which it had not the power to throw forward to go the rounds of the system, equal to the extra resistance—embarrassed by the unusual pressure of venous blood forced into it.

We have inhaled chloroform many times, to observe its influence in the stage before consciousness is lost. Among the first is a sensation of coldness of the bottoms of the feet, as though they were immersed in cold water. The blood-vessels about the neck and head begin to throb with audible distinctness. There is a sensation of fullness of the eyes and head—the very brain seems to throb, and thought becomes confused from a sensation of fullness. The surface of the body prickles and feels numb, and imparts a sensation as though the blood was receding from the surface. Discontinuing the inhalation, the symptoms and morbid feelings gradually pass away—the roaring about the head and loud throbbings of the heart and arteries gradually die away.

The functions of the brain—cognizance of pain, sensation, volition—are the first to be suspended. Whether this is the direct result of chloroform circulating in the blood through the brain, or whether it is the result of the modified action of the respiratory functions and the circulatory system, is not quite clear. If the latter be the true explanation, then chloroform anæsthesia is not unlike the anæsthesia of apoplexy, or of coma from a depressed portion of cranial bone.

The inquiry intended to be started here is, whether or no the insensibility is not the result of the disturbed function or mechanical action of the lungs, heart, and blood-vessels; and whether death does not really commence at the brain, as evinced by the stertor, the lungs following next, as evinced by a cessation of function and probable collapse, and the heart being the last to die, which last accounts for the fact observed by many, that restoration never takes place after the heart ceases to beat?

———

KEROSOLENE.

Since kerosolene was first brought before the profession as an anæsthetic, we have carefully watched the journals for the opinions of those who have given the article a trial. From a pressure of business, and ill health in our household, we are nearly two months behind in our reading, but, so far, our readers have been apprised of the opinions of those who have put it to the test, and we shall continue to do so until its merits or demerits shall determine its establishment as a valuable agent, or rejection as a worthless one. Ether has objections, and chloroform is not always free from danger. We had hoped that an anæsthetic might be found pleasant to inhale, prompt, efficient, and uniform in its action, and free from danger. Having carefully read an account of the experiments of those who had tried kerosolene, and particularly noticing the unfavorable experiments of the junior editor of the Chicago *Medical Examiner*, in our Summary last week we predicted that the remedy would soon be abandoned as worthless, unless, by some process of purification, the most favorable results of those who have tried it can be obtained with tolerable uniformity by all who may put it on trial. Before the Middlesex East District Medical Society, (Mass.,) as per report in the Boston *Medical and Surgical Journal* for October 10th, several of the members thus report their experience with the article under consideration.

"Dr. S. A. Toothaker, of Wilmington, said that he had administered the article, which was distributed at the last meeting, once, with the most satisfactory results. It acted quickly; there was no suffocative difficulty, no nausea, and no convulsions. The patient was a young man who had just recovered from tonsillitis, and the operation was for the extraction of a tooth. Upon inhalation, he began to laugh, and opened his mouth in such a manner as to afford an excellent opportunity to apply the forceps. The tooth came very hard. The man made some noise, and in a minute or two recovered his sensibilities. He knew nothing of the extraction, except by the

blood in his mouth. He was very lively and 'chipper,' and expressed himself as having had a pleasant dream. Quantity administered, one and a half fluid ounces. Whole time occupied, five to six minutes.

"Dr. H. P. Wakefield, of Reading, gave it twice to one patient with success. He was a shoemaker, who had hurt two of his fingers by working on 'army shoes.' At the seats of injury there was pus. Kerosolene was administered upon a cloth. He came under its influence very readily, and 'lost himself.' He was inclined to laugh, but he would not keep still, and as the doctor had no assistant, the operation of opening the abscesses was deferred. He soon recovered, and was dismissed to return again with a friend He did so, and the kerosolene was given as before. He readily came under it, but not to insensibility. The assistant held the wrist, and both fingers were opened to the bone. He seemed just to feel it. On coming to himself, he said he did not suffer anything. He passed from the influence of the kerosolene as readily as he came under it. Quantity employed in both trials, three fluid ounces. No nausea, no suffocative difficulty, nor unpleasant effect. Dr. Wakefield thinks the kerosolene more powerful than chloroform.

"Dr. R. L. Hodgdon, of West Cambridge, employed the kerosolene received at the last meeting, in a case of Barton's fracture of the radius. The patient went quickly off to sleep. There was no change in the pulse, and sensibility was recovered sooner than with ether, and the patient came under it more easily. Quantity administered, two fluid ounces. He also gave it to a woman for the extraction of four teeth, with success. In fact, the doctor expressed the highest satisfaction with the results of his trials.

"Dr. A. Chapin stated that he had taken the kerosolene himself, with the effect of sudden anæsthesia. He also remarked that he had given it to a lapdog. A sponge and the dog's head were placed in a coat-sleeve, and the kerosolene poured upon the sponge. The animal came under it kindly, easily, and quickly. Compared with the action of ether and chloroform upon this class of animals, the doctor stated that kerosolene had, in this case, marked advantage, in the ease with which it was taken, and in the speediness of its action. There was no suffocation, no convulsions. The dog never came to; it was killed by a hatchet."

What for? As Dr. Wakefield thinks it is more powerful than chloroform, we would inquire if anæsthetics are dangerous in proportion to their power?

We certainly hope these good results may be uniformly obtained, and the article be found utterly free from danger. A safe and sure anæsthetic is one of the greatest boons to suffering humanity, and may prove particularly so to our half a million of soldiers, daily liable to painful injuries requiring perhaps still more painful operations. In the Crimean war, in 30,000 cases in which chloroform was inhaled, only two deaths occurred.

HYDRARGYRUM CUM CRETA AN UNRELIABLE AND UNSAFE REMEDY.

Before the Berkshire District Medical Society, as per report in the *Berkshire Medical Journal* for October, the subject of the impurities, uncertainties, and often dangers, in the use of the hydrargyrum cum creta, was under discussion. Drs. Duncan, Lawrence, Bostwick, Smith, and Meacham all spoke unfavorably of it; they regarded it, instead of being the "mildest-known mercurial," as often an irritant, producing vomiting and purging.

This brings to our mind an article upon the same subject, by John C. Beck, M.D., of Cincinnati, and published in the *Cincinnati Med. and Surg. News* for August, 1860. From the same prescription, in the same patient, he found widely different results, when filled at different druggists. This led him to an analysis of different specimens. We make an extract, for the subject is of great importance—no mercurial is so much used in treating the diseases of children:—

"One specimen examined, which I supposed was prepared by steam power, exhibited 15 per cent. of the binoxide, which would be easily converted by the hydrochloric acid of the stomach into corrosive sublimate, and consequently it would be fatal to children even in small doses.

"There can be little doubt that the violent effects often produced by the administration of gray powder is due to the presence of binoxide of mercury, which is changed by the hydrochloric acid of the stomach into bichloride of hydrargyrum. As an instance, administer five grains of the gray powder containing 15 per cent. of the binoxide of mercury, the hydrochloric acid of the stomach will form one grain of bichloride of mercury, which would be a fatal dose for a child, and a coroner's jury of inquest would render a verdict of 'Death caused by the administration of corrosive sublimate,' when, in reality, it was the peroxide, till it combined with the hydrochloric acid of the stomach, and the bichloride of mercury was the result of the union. Suppose the quantity larger, 20 or 40 grains, and it is administered to an adult, and from 4 to 8 grains of corrosive sublimate be found on analyzing the contents of the stomach, then if the nurse or some person about the patient be found to have had a grudge or to have quarreled with the patient; in a word, a 'motive' be proven, *circumstantially*, almost any jury would convict the accused; when the corrosive sublimate found in the stomach

would be due to a chemical change of the remedy, and an innocent person might suffer the consequences of this accidental combination."

Dr. Beck found no uniformity or exact ratio in the amount of protoxide and binoxide present in the various parcels examined. Dr. Beck says further, that "upon the whole, I am inclined to the opinion that 'blue mass' is the safest mercurial we have."

RATTLESNAKE BITES, AND THEIR TREATMENT.

In the *North American Medico-Chirurgical Review* for March, Dr. S. W. Mitchell has an interesting article upon this subject, to which we have previously referred. The doctor has experimented largely, and reports unfavorably of *Bibron's antidote.* In the *Buffalo Medical and Surgical Journal* for October, Dr. L. S. Ham, of South Bend, Indiana, reports a case of severe rattlesnake bite, with treatment, which resulted in recovery. The following are his conclusions:—

"The foregoing case shows several important facts in the reception, the progress, and the treatment of this important class of maladies.

"1. The fang wounds were deep, and we have every reason to conclude that all was done that the animal was capable of doing, by way of imparting poison to the system.

"2. The snake was one of the very largest of the Massasaugus variety.

"3. The poison had had its local and constitutional effects before treatment was commenced, as shown by the swelling of the hand, the vomiting, and the indistinctness of vision.

"4. The good effects of the antidote are shown by the suspension of the swelling as soon as it was administered, the increase of the swelling as soon as it was rejected, and the suspension of the swelling again as soon as it could be retained on the stomach, in doses equal to from three to five drops per hour. This was very clearly evinced on two distinct occasions in our case.

"5. Its apparent good effects in my hands, and, under all the circumstances, are such as to give me great confidence in its therapeutic powers in this class of cases. Yet, I am aware that it would take many cases and further tests to fully establish its claim to full confidence in the mind of the profession."

FRACTURE OF THE BASE OF THE CRANIUM.

In the *Berkshire Medical Journal* for October, Dr. W. Deming, Jr., reports a case of fracture of the base of the skull. Blood flowed from both ears, and also from the nose and mouth to the amount of several ounces. The patient recovered with the loss of the sense of hearing.

It is quite generally believed that hemorrhage from the ears is almost, if not quite, proof positive of fracture at the base of the cranium, and such fractures have been regarded as almost or quite uniformly fatal. A very interesting case occurred to us two years ago, which, as it has not been recorded, may not be uninteresting to our readers.

A young man, about twenty years of age, while felling a tree, lodged it against another. In felling the second, he failed to sufficiently escape, and received a blow upon his head from a limb of the falling tree. He was knocked down, and remained senseless until picked up by his friends. Blood flowed from his ears and nose. We were called in, though the patient was eight or nine miles away, and associated with Dr. Smith in the case. We found the patient irrational, and in spite of remedies he remained so for five or six days. After a time flashes of intelligence began to be discoverable, and when consciousness seemed perfectly restored, he seemed to have lost the faculty of memory. The recognizance of persons and things was entirely wanting.

In fact, he did not know his letters, could not read nor write, and the past, as to his life, his acquaintances, and his literary acquirements, all were involved in oblivion. Quinine and strychnine were the remedies relied upon, and now we have the satisfaction of reporting that the past, as to fact and as to intellectual acquirements, is entirely restored, and it would be difficult to find a young man of his years more intelligent, and with stronger moral perceptions than our patient.

ACTION OF OPIUM ON THE GENITO-URINARY ORGANS.

In our *Summary* of last week we referred to the opinions of Dr. Woodward, in regard to the action of opium upon the urinary and genital organs. In the *Boston Medical and Surgical Journal* for October 17th, Dr. George B. Willson, of Port Huron, Michigan, has an article upon the same subject.

With Dr. Woodward, Dr. Willson regards opium as one of our most efficient diuretics. In regard to its mode of action, he says: "It acts upon the kidneys as a direct irritant, and thus stimulates them to increased secretion of water simply; just as iodine, bromine, digitalis, and the like act." Dr. Willson also regards opium as a decided anaphrodisiac. He further attributes to it a property that we never saw previously ascribed to it. He says it is an *abortifacient*, if we but know how to use it. He, however, does not

tell us how to use it, to secure this result. There are some conditions of labor where it evidently acts as a parturifacient; but that it can be used as an efficient abortifacient, we are inclined to doubt.

MURIATED TINCTURE OF IRON A PROPHYLACTIC OF ERYSIPELAS.

In the *Chicago Medical Examiner* for October, Prof. E. Andrews has a lecture upon hospital gangrene and erysipelas, in which the following language occurs in regard to the prophylactic power of the muriated tincture of iron :—

"In civil surgery, I have made extensive use, for three years, of muriated tincture of iron as a prophylactic. Having observed the powerful effect of this remedy in cutting short the disease after it has commenced, it occurred to me to use it in advance to prevent the attack. I have therefore given it with this view, after all my cutting operations, both in the hospital and in private practice, and the result is, that *since I have commenced this precaution, no patient of mine has died of phlebitis, pyæmia, nor any other form of traumatic erysipelas.* I cannot but think, therefore, that the adoption of the same plan would greatly reduce the mortality in military hospitals."

In regard to the curative action of the remedy, he makes another practical remark worthy of mention here. In erysipelas he thinks there is a morbid alkalinity of the fluids of the body, besides a specific poison circulating in the same :—

"The perchloride of iron acts directly, I think, upon both conditions. It rapidly neutralizes the alkalies and induces a plastic diathesis, and the chlorine destroys the organic poison. In order to get this decisive influence, it is not enough to give ten or fifteen drops of the tincture a few times a day. *Twenty or thirty drops must be given every hour or two, until the effect is produced.*

MILK-SICKNESS.

The cause of milk-sickness is a vexatious, and, perhaps, still an unsettled question. Milk sickness in the human species, as is well known, is produced by the use of milk obtained from cows suffering from a peculiar poison or disease; what that poison is, is not easily determined, and there seems to be a diversity of opinion in regard to the matter. Some have supposed the disease from which the animals suffer is identical in cause with that which produces malarial fevers in the human species. Others have supposed that the animal was poisoned by eating the *rhus toxicodendron.* Others that the waters which the animals drank were poisoned by some mineral poison. Still others—and to that opinion we were disposed to be inclined, from the experiments made by Dr. J. E. Nagle, as reported in the *Nashville Jour. of Med. and Surg.* for October, 1859—that it was produced by the animals eating fungus or ergotized grass. In the *Chicago Medical Examiner* for October, Mr. George Fisher has an article in which he expresses the opinion that the causative poison is *cicuta.* He says he has visited many localities where the disease appeared, and in all cases, he says—

"I found springs running over large pieces of wild, uncultivated land, producing swamp and damp ground. On this wet land, little else grew but the *cicuta.* The *cicuta* has large, fleshy roots, from which the stem is easily detached; the cattle, in dry times, resort to these springs for drink, and tramp off the roots, which decay, and impart their poisoning substance to the water; the impressions made by the cattle's feet, in the wet land, become filled with water, and they drink this water, saturated with the decomposed *cicuta* roots; death or disease of some kind must inevitably follow." * * * "I have seen, in swampy and wet places, large quantities of detached roots of the *cicuta*, in every stage of decay; the water colored by the decomposed roots, and this water was drank by the cattle. In all places where I found *cicuta* in this condition, milk-sickness prevailed."

ANÆSTHETICS—SULPHURIC ETHER.

In late numbers of our *Summary*, we have made frequent reference to *kerosolene* as an anæsthetic, chloroform, etc. The subject of anæsthetics has, of late, been attracting considerable attention, and we shall continue to keep our readers posted in all new developments and opinions upon this all-important subject.

Before the Boston Society for Medical Improvement, a report was made upon *ether*, by a committee composed of the following named gentlemen, viz., Drs. R. M. Hodges, George Hayward, S. D. Townsend, C. T. Jackson, and J. Baxter Upham. Their *report* is published in the *Boston Med. and Surg. Journal* for October 24th. We shall make a very condensed statement of a few of their opinions. It is well known that the physicians of Boston have ever been partial to sulphuric ether, and give it preference over the other anæsthetics. The committee take it upon themselves to prove that "sulphuric ether is, of all anæsthetic agents, alone worthy of unlimited confidence." After a careful examination

of the medical journals, the committee find forty-one cases in which death has been ascribed to sulphuric ether. These cases are thoroughly sifted, perhaps justly, upon the principles of exclusion, until not a case is left, and the committee then affirm "that their careful search of journals and monographs furnishes not a single conclusive case of death from the proper inhalation of pure sulphuric ether." If the *reputed* deaths from *chloroform* were as thoroughly sifted, and with the same seeming intent to effect total exclusion, the nearly two hundred deaths attributed to chloroform possibly might be diminished in number. "Conclusive case," "proper inhalation," and "pure sulphuric ether," or other agents are qualifications that will admit of considerable latitude as to results.

From our reading and observation, we should think, in this country at least, chloroform was given by inhalation *ten times* where sulphuric ether was *once*. Certain are we, that we never thus used the ether more than four or five times. In thirteen years, in all our other cases, where an anæsthetic was desired, chloroform has been used. Besides, we have probably used it more than one hundred times in *convulsions*. As yet, we have never seen any bad results, nor failed to get the desired result, which last, we certainly have with sulphuric ether. If it should be true that, taking the world over, chloroform was administered by inhalation ten times where ether was once, and there has been forty-one deaths attributed to the latter, and less than two hundred to the former, then the *ratio* of attributed deaths are *against* the sulphuric ether.

In making this supposition, we do not wish to be understood as questioning the correctness of the committee's statement, that no death has probably resulted from the proper inhalation of pure sulphuric ether; neither do we wish to be understood as claiming exemption from danger in the inhalation of chloroform. What we would infer is, that with the same precautions as to purity with each—the same understanding in regard to the proper method and precautions of administration respectively—with the same number of cases, and the same profundity of anæsthetic impression in the respective use, might not give such widely different results as some suppose. The conditions and precautions of administration with the two agents are slightly dissimilar—chloroform, being a decided sedative, should in all cases be *preceded by the administration of an alcoholic stimulant*. Sulphuric ether, being in its action a stimulant, does not require this precaution. But we have been led away from the paper before us, and will now return. The committee say:—

"The *safe* inhalation of ether requires proper attention—first, to the quality of the article used; second, to the method of administration; third, to the symptoms which present themselves while the patient is under its influence."

Thus it will be seen that even ether requires caution. As it is not difficult to get the sulphuric ether in purity, we shall only refer to the method of administering. The committee say:—

"Ether should never be given from an inhaling apparatus. The best medium of its administration is a bell-shaped sponge, large enough to cover in the nose, mouth, and chin; but it is difficult to find one of sufficient size and close enough in texture, or without such numerous apertures at the root as to admit too freely the atmospheric air. A sponge of this sort, moreover, being as expensive as rare, is seldom used outside of hospitals. A stiff towel, properly folded, may be substituted, and has the advantage of being always at hand; as it may be left behind, the surgeon does not carry away with him the annoying odor of an impregnated sponge. It is desirable that the towel should be a new one, and of pretty good size. It is to be taken just as it comes from the laundry, and not unfolded further than to display it in the dimensions of about ten inches by five; by folding down two of the corners in such a way that they shall lap over each other a little, and securing them by stout pins, a cone will be made which fits the face admirably. The thick layers of toweling will hold sufficient ether, and its texture prevent a too free dilution of the anæsthetic by atmospheric air, provided the apex and seam of the cone are carefully and tightly closed, either by pins or the fingers. As the cone becomes collapsed by saturation, it should from time to time be opened and kept in shape by distending it with the hand." * * * "Ether should be poured lavishly on the towel or sponge, an ounce or two at a time, especially at the commencement of inhalation."

The committee advise that the pulse be watched through the whole process of etherization.

"The best test of complete etherization is the snoring of the patient; and no operation, unless slight, should be undertaken until this symptom presents itself."

This is not always necessary in the use of chloroform. To-day we performed an operation of great painfulness, requiring not more than half a minute for its accomplishment. The patient was a young lady of about eighteen years, and very nervous. We let her inhale chloroform,

not to complete insensibility—in fact she seemed quite rational. She said she felt no pain, though she was frightened, she said, at watching our movements, knowing what was to be done, and fearing pain. Though cognizance of facts was present, cognizance of pain was gone. Such a fact as this has an important medico-legal bearing upon such cases as that of Dr. Beale and others.

The committee claim that sulphuric ether can

"Be administered to persons of all ages, from the new-born infant to the octogenarian. In weak, strumous children, and in old persons where there are reasons for suspecting fatty degeneration of the heart, it should be used with caution."

The committee say that there are but two arguments urged in favor of chloroform over sulphuric ether, viz., it has a *more agreeable odor*, and is more rapid in its action. The committee attempt to prove that the *effects* of the sulphuric ether are *more agreeable* than those produced by chloroform, and that, if the first odor of chloroform is the more agreeable, the secondary sensation of this kind is that of an extremely "nauseating and sickishly-sweet odor." As regards the rapidity of action, the committee say that

"A patient may be put by *ether* into a thorough anæsthetic condition for the performance of a by no means short or trivial operation in one minute and a third. Chloroform can hardly do more than that."

The committee's conclusions are summed up in *six* distinct propositions. As the substance of the first four are already given, we subjoin the last two, viz.:—

5th. "In view of all these facts, the use of ether in armies, to the extent which its bulk will permit, ought to be obligatory, at least in a moral point of view.

"6th. The advantages of chloroform are exclusively those of convenience. Its dangers are not averted by its admixture with sulphuric ether *in any proportions*. The combination of these two agents cannot be too strongly denounced as a treacherous and dangerous compound. Chloric ether, being a solution of chloroform in alcohol, merits the same condemnation."

It is but just to observe that to this last conclusion Dr. C. T. Jackson demurs.

"He believes that a mixture of four measures of ether and one measure of chloroform may be employed without danger, or with very little danger, and that the risks from chloroform are diminished more than four-fifths by this combination."

The above is the substance of the *twenty-six* printed pages of which the report consists.

THE EFFECT OF HEAT ON VACCINATION.

In the *Lancet and Observer* for October, Dr. C. A. Hartman, of Cleveland, Ohio, puts the following inquiry:—

"As far as my own experience goes, as well as that of some professional friends, hot weather destroys the effect of vaccine virus to such an extent as to render vaccination during the months of July and August entirely valueless. With the best virus, and the most approved method of operation, we find it impossible to more than start the pustules, which invariably dry off and disappear by the fifth or seventh day after vaccination, leaving no mark beyond that of the incision or puncture. Sometimes this happens in June or May, if the temperature rises considerably in those months. Have not others made similar observations? If so, it would be important to know it, as it would be a valuable hint as to the best season for vaccination."

REVIEWS AND BOOK NOTICES.

Report of a Committee appointed by the Sanitary Commission to prepare a paper on the value of Vaccination in Armies.

The committee, both of whom are Philadelphians, have grouped together in a brief space some valuable statistical information upon the important subject of vaccination in armies, and in so doing have done a service to the profession generally. The conclusions at which they arrive are: that vaccination is a positive protection against small-pox within certain limits; that there is a period of life when that influence declines, and hence the importance and necessity of reprotecting the system by revaccination.

Our own conclusions, based on good opportunities for study and observation, are, that vaccination is a positive and unlimited protection against small-pox, quite as much so as the disease itself is against a recurrent attack—*when the operation is properly performed.* The reason why "revaccinations" so often prove effectual, we believe exists in the fact that the vaccination was not properly performed in the first instance. If the system is insufficiently protected by a half-performed operation, revaccination will produce a *vaccinoid*, not a true vaccine disease; and the person thus imperfectly protected is liable to, not variola, but *varioloid*, a disease of very little consequence, as regards mortality, when compared with the former. If there is a period of life when the influence of thorough vaccinia declines, then there is a period when the influence of variola declines, and the person is liable to a second attack. It is well known that there are idiosyncrasies of constitution which render their possessor liable to repeated attacks of small-pox, and that the same holds true in regard to others of the exanthematæ.

According to our observation, too, when small-pox prevails epidemically, the vaccine disease is more perfect, and more easily propagated. To our mind, the fact that so many persons who have been vaccinated have variola or varioloid, the vaccine or vaccinoid disease, proves that they were carelessly vaccinated at first, and either not protected *at all* or but partially protected. In Germany, vaccination is generally more thoroughly performed than in this country; we would be glad to have some statistics of the result of revaccinating the *German* volunteers. It would have an important bearing on this question.

As a manual or "hand-book" for the surgeons of the army, its publication, in our opinion, pays a very equivocal compliment to their intelligence, and forcibly suggests the inquiry whether the money spent in issuing it from the press would not have been much more usefully employed in supplying vaccine virus sufficient to revaccinate all the soldiers in the army, if that be deemed necessary.

A Thesis on Hospital Hygiene, for the Degree of Doctor of Medicine in the University of New York. By Valentine Mott Francis, Member of the New York Historical Society. Printed by permission. New York: 1859, pp. 217.

When the good Dr. Francis, of New York, parted with all earthly things, we felt that it occurred when he could least be spared. He had grown up with the nation; he had witnessed the prosperity of its early years, and had lived to see approaching the dark clouds which were soon to gather around it. It appeared, indeed, that he was part of the happiness of his native land, for as her star began to dim, his disappeared from the constellation where it had been so long admired for its brilliancy and its beauty.

It is a seemly sight to see the son taking up, as it were, the broken thread of the father's life, and giving us some help in these eventful times, pregnant as they are with woe to humanity.

There never has been a time, certainly not on this continent, when the subject of hospital hygiene claimed such careful and earnest attention, and now that the oldest of our States has been converted almost into one vast camp, presenting all the contingencies of wide-spread and potent disease, it is the duty of all who can give any advice on this subject to do so heartily, and urge its importance.

This book of Dr. Francis is replete not only with evidences of a profound and classic knowledge of the subject of which it treats, but with important practical suggestions with reference to the *site, location, architecture, ventilation,* and *government* of hospitals. Now that the smoke of the first battle, which threw everything military into chaos, has cleared away, we hope to see much improvement in the hospitals about the capital; in the emergency almost any *empty* building was seized upon, and, without reference to its adaptedness, converted into a hospital; this at that time was unavoidable, but now, with their able and sufficient corps of surgeons, and with the immense resources at their command, it has become the duty of those having control to see that they are conducted in accordance with the dictates of science and humanity.

The preliminary observations, for the length of which our author makes apology, are to us the most attractive part of the work; here he gives an interesting historical account of the origin and progress of hospitals, and discusses earnestly and feelingly the necessity of treating the poorest and most depraved of patients with the greatest kindness and sympathy.

The pages devoted to the consideration of the *location* and *government* of hospitals will be found exceedingly instructive, and we recommend them to the attention of our army surgeons, fully believing that if our author's suggestions are observed, they will be productive of much more benefit to the sick and wounded soldiers than all the reports or arrogant pretensions of a mongrel sanitary commission.

Take it "all in all," Dr. Francis' book is a fair offering at the shrine of the goddess Hygeia.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, FEBRUARY 8, 1862.

REMOVAL.—The office of the Reporter has been removed to the N. E. corner of Seventh and Sansom Streets, below Chestnut. Correspondents will be careful to note the change. tf.

MILITARY DRILL—PHYSICAL CULTURE.

Like the hibernating animals which inhabit the regions of perpetual snow and ice upon our northern shore, the military spirit has lain dormant through a long winter of peace and quietude. Years ago the servant of God ministering from the sacred desk laid upon it the hand of mercy, and exorcised in our own land the spirit which would perpetuate strife upon the battle-field. The glare of military parade, the glitter of bayonets, the measured tread of soldiery was nearly forgotten. The sword was rusted in its scabbard or "beat into a plowshare," and the spear had taken up the more serviceable occupation of "a pruning hook." But the spirit would not stay thus exorcised. It has broken the chains which bound it in its days of hibernation, and we now see it cropping out everywhere ll over our land. The military spirit is most thoroughly aroused. From young America just toddling from its swaddling clothes, to the gray-

haired veteran of fourscore years, through all the intermediate stages of life, we witness an ardent desire to seek for glory at the cannon's mouth. It pervades all classes and ages without distinction. Go where we may—into the family circle, amid the retirements and privacy of the family hearthstone, into the highways and by-ways of the country, or the streets, lanes, and avenues of the city, into the public assembly convened for whatever object and on whatever occasion, into the shops, places of public resort for amusement or news, everywhere, emblazoned on every countenance and upon every object around, we observe unmistakable indications that the military spirit is to a large extent absorbing the energies of the people. Samson has grown restive under the green withs that bound him, and they have become as tow in his hands.

Now what is to be the result of all this? To say nothing of its effect, present or future, upon the *morals* of the people, (a theme which, as medical journalists, we have no disposition to discuss,) what will be the result as it regards the health and physical energies of the generation now upon the stage of action, and what upon those who are soon to take their part in the great drama of life? Is it to lead to the introduction of military tactics into our schools as a branch of education? Such an idea has been suggested, and if it be carried into operation we have no doubt the most beneficial results will follow to the physical system of the student. It will give vitality and energy to the brain and nervous system; enlarge, expand, and strengthen the chest, making room for a full expansion of the air-cells of the lungs; it will produce a healthy tone and action of the stomach, and remedy the dyspeptic symptoms so common among students. It will give a healthy glow to the countenance, and impart to it freshness and vigor. The enthusiasm attendant upon it will impart energy to the entire system, the form will become erect—the position designed for it by the God of nature—and the muscles of the whole body will be developed in harmony. How many pale, wan, waxy, stooping, listless, drooping forms of humanity do we now see in our schools, that just drag their enervated bodies about! How would their steps be quickened, how much more freely and vigorously would the blood circulate through the veins, and how speedily would their listlessness disappear under the endless variety of evolutions of military drill! And with how much zest would they return to their studies after such an exercise! The entire muscular system is here brought into play; the limbs are thrown into all possible positions. In walking, one set of muscles is brought into action, while the others are comparatively quiet; so also in riding or in any of the athletic games; but in developing the whole system, in giving free exercise to all its parts so as to preserve a sound and healthy body in harmony with the laws of nature, which always seeks uniformity and symmetry in her operations, the military drill is beyond comparison the best. However much, therefore, the introduction into the school of the military *spirit* might be detrimental to its interests (as it no doubt would be) as tending to foster a belligerent spirit in the pupil, the military drill would promote the vigor both of his intellectual and physical organization, and, if properly enforced, would teach him to be an obedient citizen of the commonwealth.

But it should be introduced, if at all, under the direction of a competent teacher, one who is thoroughly acquainted with the structure and functions of the body as well as familiar with the laws of hygiene; and it should be made a part of the regular system of instruction. It should not be introduced merely as a pastime, which it would very likely become if incompetent instructors were employed, but incorporated into the regular routine of studies and stamped with the same importance as any other branch. In the military academies and colleges of our land this feature of instruction has long been made prominent, and the result is that the military cadet is remarkably free from all those ailments which are common to student life, and exhibits a freshness of countenance, and vigor of the physical system, which attract the attention of the most casual observer. Should the same rigidness of military drill and discipline be introduced into our schools generally, the same results would still follow, and instead of the puny, sickly specimens of humanity, scarcely able from inanition to drag their pedal extremities after them, and that need a machine to enable them to draw in and force out the air necessary to keep their blood from utter devitalization, we should have a race of strong, vigorous, athletic children, youth, and men; and as physically, so also mentally, the same results would ensue.

While, therefore, the military spirit so thor-

oughly pervades the great mass of the people, we would rejoice if its drill and discipline were as thoroughly and as extensively practiced that, while as a nation we are improving in military prowess, our children may also make rapid progress physically as well as mentally.

EDITORIAL NOTES AND COMMENTS.

Couches for the Hospitals.—Among the many conveniences provided for the accommodation and comfort of the sick and wounded soldier in the hospitals at Washington, we learn that Surgeon-General Finlay has provided a newly-invented spring couch, which is intended to take the place of the old-fashioned cot or bedstead. This new bed is equally adapted to camps and hospitals, and can be taken apart and tied up almost in a man's handkerchief. The bottom is made of thin slats of pine of the smoothest quality, which are provided with elastic springs of finely-tempered metal, which yield comfortably to the pressure of the recumbent body. They require only a very light mattress, weighing four pounds; thus dispensing with the heavy straw or hair mattress—generators of malaria or fever—and giving besides a much more comfortable bed to the soldier. This is provided by the medical bureau of the army, and is only one of the many articles of comfort which that department, in its quiet and unostentatious manner, is furnishing the hospitals. The staff cannot find time, from its unwearied labors for the welfare of the vast army now in the field, to publish pamphlets extolling itself for performing its duty. It quietly does its appropriate work, and reports only to the heads of the government. And yet we candidly think that, in this particular crisis, the people should know what is being done by the medical staff for the health of the troops.

Military Hospitals at Augusta, Maine.—From the report of the committee appointed by the Maine Legislature to investigate the condition and management of the hospitals in Augusta, we gather the following facts: At their first visit to the Winthrop Hall Hospital they found it crowded to its utmost capacity with sick and disabled soldiers, the buildings exceedingly filthy and poorly ventilated; two hundred and twenty men were inmates of the hospital, and were suffering from foul air, want of proper nursing, and neglect of hygiene. Subsequently they found it in better condition, well provided with beds and bedding, and the patients with suitable change of clothing, with good medical attendance and conveniences, under the superintendence of Dr. Buxten. The other hospitals were found to be in good condition, under the direction of Drs. Bates and Gordon, and Surgeons Donnell and Kimball, Adams and Westcott. A total of 837 were reported sick in the several regiments and batteries.

Completed.—The series of articles which was commenced in the columns of this journal in May last, entitled "*Hints and Observations on Military Hygiene*," etc. is concluded in the present number. These articles have been received with great favor by the profession generally, and have been extensively copied into other medical journals. A great amount of research and labor has been expended upon them, and their author is deserving of credit for the concise yet comprehensive manner in which he has presented the subjects treated. They are now republished in pamphlet form, and as a monograph upon medical and surgical diseases in the army, and the best means of preventing and curing them, will be of great value. Their author, it gives us pleasure to announce, is Laurence Turnbull, M.D., one of the surgeons of the Howard Hospital of this city.

Board of Health in New York.—The following is a synopsis of the bill introduced into the Legislature of New York by Mr. Coddington, in relation to the public health of New York:—

The bill creates a Board of Health, consisting of the Health Officer General, the State Health Officer, the Chairman of Public Charities and Corrections, the Presidents of the Commissioners of Emigration and of the Public Dispensaries, and three Physicans, to be chosen by the Boards of Trustees of the said Dispensaries. The term of office of the physicians to be determined by lot, and one to go out of office each first of January, and a successor to be appointed by the Boards annually, to hold office three years. The Board of Health to organize on the first Monday of May next. The Secretary and Treasurer to receive not exceeding $500 yearly salary. The Board to meet at least once in each month, and to be provided with accommodations and supplies by the Common Council. All powers and duties pertaining to the public health are vested in the Board, who have authority to create and amend laws and regulations, and to impose fines and penalties. The Supervisors are required to pro-

vide money to meet the expenses of the Board, and in case of emergency to raise a loan such as the Board shall certify to be necessary. The Board shall appoint thirty-six District Health Wardens, from the Visiting Physicians of the dispensaries, who shall receive $3 a day for their services, and report the sanitary condition of their districts each day to the Health Officer, and perform such other duties as the Health Officer General, or Board, may direct. The office of Health Officer General is created by the bill, to be appointed by the Mayor of New York, for three years. He shall be Head of a Health Department, to which shall be attached three Bureaus—Sanitary Inspection, Records and Statistics, and Markets. The organization, powers, and duties, mode of appointment and compensation of the officers of the Department, to be the same as in the present City Inspector's Department, subject to such changes as the Common Council may by ordinance direct. The Health Officer General to execute all orders and instructions of the Board of Health, to see to the enforcement of all ordinances, and to make monthly reports to the Board, and yearly reports to the Common Council. The City Inspector to perform the duties of the office until a Health Officer General is appointed.

Report of the Surgeon-General of Pennsylvania.—From this report, a copy of which has just come to hand, we learn that the hospital department of Pennsylvania is in good condition, thoroughly organized and efficient. Of 305 candidates who presented themselves for examination for the posts of surgeon and assistant surgeon, since May 15th, 91 have been recommended as surgeons, and 144 as assistant surgeons, the balance having been rejected for incompetency or having withdrawn. Ten surgeons and two assistant surgeons have since been examined by the United States Board of Army Surgeons and promoted to the posts of brigade surgeons; seven surgeons and twelve assistant surgeons have resigned; and one assistant surgeon has been killed in action.

In addition to the examination, organization, and discipline of the medical staff of the State, the hospital department has closely supervised all sanitary measures connected with the welfare of the troops. Hospitals were built at Camp Wright, near Pittsburg, Camp Curtin, Harrisburg, Camp Washington, Easton, and Camp Wayne, at West Chester, and furnished with all that was requisite for the comfort and welfare of the sick soldiers. Active steps were early taken to secure the troops against the small-pox.

"Of the reserve corps nearly 12,000 were vaccinated or revaccinated, and all subsequent levies of troops have been similarly cared for. Although the sudden departure of regiments for the field has prevented accurate returns from the regimental medical officers, it is believed that at least 30.000 men have been carefully protected from this loathsome disorder.

"Special hygienic measures were also taken to preserve them from camp epidemics, as measles, dysentery, and typhoid fever, the camps having been generally healthy, the proportion of sick to the number of troops in camp having rarely exceeded one in the hundred, and seldom reached that ratio, except during the prevalence of diarrhœa.

"The department has also provided every regimental surgeon with a full set of surgical instruments of the best quality, together with medicine chests, hospital knapsacks, hospital mess chests, ambulances, and surgical books likely to be required for reference or study; the supply of each corresponding with that furnished regular troops by the United States Government In all pertaining to its medical organization the condition of the Pennsylvania volunteers is, it is believed, as perfect as that of the regular army, the best nurses and attendants having been alone taken from the ranks of the troops, or specially enlisted for this purpose."

Medical Society of New York.—This body commenced its sessions on Tuesday of this week, at Albany, Dr. E. H. Parker, of Poughkeepsie, presiding.

"On Wednesday, a very able and interesting paper was read by Dr. Swinburne, of Albany, embracing the evidence in the case of the death of Mrs. Rudge, taking the position that her death was not a suicidal act, but that the wound in the throat must have been inflicted by another person after death. The paper was illustrated by cuts and models, showing the theory of the manner of her death.

"A resolution was adopted declaring against the introduction of the homœopathic practice in any portion of the army.

"A resolution to amend the Code of Ethics, by striking out that part which forbids patenting surgical instruments, was laid upon the table."

Hippophagy is still being agitated by the French. A feast was recently given in Algiers, which was participated in by the high public functionaries, and other eminent persons, at which horseflesh was served up in elegant style. The object of the entertainment was to combat, by example, the popular prejudice against such food. As it is asserted that the skill of French cooks is capable of making anything palatable, even, it is claimed, to produce a delicate dish out of an old pair of boots, we do not doubt that the flesh of worn-out horses may be made eatable.

Correspondence.

BELLADONNA IN DIPHTHERIA.

Circleville, Ohio, Dec. 30, 1861.

Messrs. Editors:—Our friend Dr. Gibbs has seemingly endeavored, by commenting on and reduplicating an extract from an article furnished by me to the *St. Louis Journal*, to give either the extract or its author an unexpected notoriety.

In your's for the 14th of December, he brings forward again said extract, and calls in Dr. White by way of rejoinder; and we wish to know, under the circumstances, if Dr. Gibbs is "*satisfied.*" He gave at once his qualified condemnation of our suggestions, the results of which we claimed only as inferential evidence, and now insist are not refuted by any single test, conducted in the manner related by Dr. Gibbs, nor by the assumed "*dissolution of the blood*" pathology of Dr. White.

Dr. Gibbs says, when our article came to hand, he had "*four* very bad cases of diphtheria under treatment. One on the first day, and three on the third of the disease, though well advanced and terribly severe. The belladonna was at once put on trial, though our *other remedies* were not at all interrupted. *Two* cases died and *one* recovered. In the case in the first stage, it produced head symptoms that so alarmed the *friends* that we discontinued it."

This experience, if not creditable to the drug, is alike discreditable to the "drugger." Since which, Dr. Gibbs informs us, he has not "resorted further to the remedy;" but endeavors to settle the question by Dr. White, who (knowing little or nothing of belladonna as a curative agent in disease, and assigning as an apology for this want of information that the remedy was brought into notice by an empiric,) is equally ready to condemn its administration, especially in a disease "*characterized by exudation growing out of a dissolution of the blood.*" In such, says Dr. White, all sedatives are *injurious.*

Merely for the benefit of our friend Dr. Gibbs, who says he cannot speak favorably of the remedy, and Dr. White, who, with less experience, pronounces its administration "*irrational empiricism,*" we wish to know if medical science is at present resting upon "irrational and dogmatic assumption"?

How does Dr. White know exudation is dependent upon a "*dissolution of the blood*"? What constitutes a dissolution of the blood? Are *all* sedatives injurious? Has Dr. White tried them *all?* Have sedatives no curative agency in disease, excepting their narcotic impression? What are we to understand by the much-harped-upon "blood disease"? A change of polarity—a fermentation—a poison in and independent of the circulation, or what?

To pronounce diphtheria, in a loose manner, a blood disease—a dissolution of the blood—can form no philosophical deductions for treatment; *not even with alteratives.*

Many questions might be asked; but until some learned Æsculapius, gifted with all the graces in predetermining therapeutics and pharmacy for the profession—condemning this and lauding that—working the whole problem by means of a mental crucible and spectral patient—can tell us why one narcotic counteracts or destroys the poisonous effects of another, and why castor oil produces catharsis, we will rest easy, believing there are more things mysterious on earth and in medicine than were ever dreamed of in their philosophy. Give us your *experience*, gentlemen. One fact, founded upon such, however humble, is worth more than a volume of theories.

The so-called "*science*" of medicine is of necessity a bundle of "*irrational empiricisms.*"

Our knowledge comes not from any course of reasoning, by which we are enabled to determine beforehand the effects of any remedy in disease. And our pathology may be corrected many times by the manifestations of the drug; but the medicinal agent will never yield its allegiance to our ethereal pathology.

But enough of this. Counter to the expressions of Drs. Gibbs and White, I can say that, with additional experience, I have no reason to change the views heretofore expressed.

N. E. Jones.

DIPHTHERIA; ITS NATURE AND TREATMENT.

Lancaster, Ohio, Jan. 28, 1862.

I am certain that any remedy employed in this disease by the physician, that will not tend to aid nature in expelling such impurities as might impede her ingenious efforts, would, according to the common acceptation of the adage, be locking the door and leaving the rogue within. On those patients whom I have treated for diphtheria, an efflorescence invariably showed itself about the fifth day, most commonly on their epigastrium

and along the sternum and trachea. This eruption infallibly denotes the approach of a favorable crisis. I have witnessed some that were unsuccessfully treated, who, during their illness, did not exhibit any of this efflorescence; but scarcely was the vital spark extinguished, when a profuse eruption made its appearance on various portions of the body, of a confluent nature, exhibiting a dark, purple hue, and yielding a fetid odor. Those symptoms induce me to think that diphtheria is an eruptive fever, something analogous to that of erysipelas. I am certain that both of these diseases are made manifest by the action of malaria on the impurities of the general system.

The following are among the remedies I use:—

℞.—Calcined magnesia, ʒiij;
Syrup of saffron, fʒss;
Simple syrup, fʒij;
Oil of peppermint, 5 drops. Mix.

A tablespoonful to be taken every hour until it affects the bowels.

℞.—Cochineal and saffron, each ʒss.

To be properly triturated in a mortar and dissolved in two ounces of boiling water. Then add half a drachm of quinine, one drachm of tinct. hyoscyamus, two grains of iodine, two grains iodide of potassium, and two ounces of simple syrup.

A teaspoonful to be taken four times a day.

℞.—Iodide of potassium,
Iodine, of each grs. iv;
Tinct. hyoscyamus, fʒij;
Rain water, 2 ounces. Mix.

This to be used as a gargle four times a day, as long as any trace of the disease remains.

When the patient becomes convalescent, he should take a wineglassful of the compound decoction of sarsaparilla (U. S. P.) three times a day, for at least twelve days, with the addition of one ounce of lime-water to each pint of the decoction.

Edward Lynch.

MEDDLESOME MIDWIFERY—INVERSION OF THE UTERUS—FATAL TERMINATION.

East Fairfield, Ohio, Jan. 25, 1862.

Messrs. Editors:—I take occasion to present you with a brief account of a case of inversion of the uterus. On the 21st inst., I was called to see Mrs. S. After riding a distance of four miles, I arrived at her bedside. Found her pale, pulseless, speechless, bedewed with a clammy sweat, and dangerously exhausted from excessive hemorrhage. The midwife, who had been employed to attend her in her confinement—an old woman, who tells her neighbors that she has had a regular training in the art of midwifery, and that she has "stuff" to rub on the hypogastrium to prevent after-pains, etc.—informed me that the after-birth was very large, and that she could not get it away. On examination, I found the womb inverted and protruding entirely outside of the genitals, with the placenta partly adherent to its fundus. Although I considered her in articulo-mortis, I deemed it proper to return the uterus to its natural position, that she might be decently interred. The placenta was detached from the fundus with but little trouble. The womb being very flaccid was readily replaced, without causing the patient any pain, by indenting the fundus with the thumb, and carrying it within the os with the back of the index and middle fingers. The lady expired soon after the operation. The inversion, I believe, was caused by the midwife making traction on the cord while the uterus was in a relaxed state. She had also made desperate efforts to remove the whole mass. Comment is unnecessary.

C. Kay, M.D.

ARMY CORRESPONDENCE.

A correspondent at Rolla, Missouri, gives the following intelligence relative to the sanitary condition of the troops in that vicinity. He says:—

"Ten per cent of the entire army are on the sick list. The prevailing diseases are measles, typhoid fever, army dysentery, and pneumonia. In two of the regiments small-pox has broken out, but as yet the cases are few. The mortality is very great; prostrating and fatal diseases are so prevalent that the subject should receive prompt and thorough official investigation."

The writer argues that climate will not account for this very great amount of sickness among the troops. Arkansas and Missouri soldiers suffer more than those from Northern Illinois and Iowa. There is also a marked disparity, too, in regiments encamped side by side. Among the causes for this alarming mortality, he mentions the following, and his views are so candidly stated that we give them in full:—

"I. Lack of sanitary precautions. Camp life, under proper conditions, is the healthiest life in the world; but in this climate, if those conditions are neglected, death reaps a fearful harvest. Among the comforts and conveniences of home it is comparatively easy to obey the laws of health, in cleanliness of person and dress, and

correct diet; but in camp, soldiers will not do it, unless it is insisted upon and made the object of unremitting personal attention by their officers. At this post, for instance, while there have been upward of a hundred deaths in the 35th Illinois, the 2d Missouri (Colonel Schœffer) has lost only four men by disease since it entered the service, shortly after the war broke out. This regiment is composed exclusively of Germans, who show, as a class, much less mortality than our troops of native birth; but Colonel Schœffer is an old soldier, who enforces the observation of hygienic laws, and his hospital is in a better condition than any other in the entire command. The 13th Illinois, (Colonel J. B. Wyman,) which is one of the best regiments in the country, composed of intelligent men, who have gone through much hard service, was mentioned to me as another fortunate command, which had lost only 16 members. A visit to its camp explained the cause. The location is high and dry; the men are all provided with Fremont tents, properly warmed and ventilated, and their quarters are dry, clean, and tidy. All their garments are washed at least once a week, and cleanliness of person and the proper preparation of food is rigidly enforced. If the officers of other regiments exercised the same care in these respects as Colonel Wyman and his subordinates, the results would be most happy. On the other hand, we found the men of the regiments which are suffering the most, wallowing in mud up to their ankles, and their quarters often in a condition which rendered the prevalence of typhoid fever and small-pox of easy explanation. The 4th Iowa, which has suffered severely, having buried 52 men within a short time, should be excepted from this category. It comes from a sparsely-settled region, and when measles broke out among the men there were upward of 400 cases within a month. The disease left the systems debilitated, and in many instances slight imprudence, in going out too soon in the raw, damp air, brought on pneumonia, which soon proved fatal.

"II. Lack of proper medical attendance and supplies. The commander of a division said to me: 'I needed and applied for five surgeons, but have been able to obtain only one; and it is utterly impossible for him to give my men the attention they require.' The colonel of one of the regiments, which has a very large sick list, remarked: 'Red tape, or incompetency, or both, is killing my men. It is impossible to obtain proper medicines in adequate quantities. When we require, and ask for expectorants, we receive a little of what we need, and a great deal of calomel, or something else which we do not need.' The surgeon of the post hospitals complained in the same strain, that he found it impossible to obtain from the head of the medical department in St. Louis, articles imperatively needed by his patients. So far as bedding and clothing are concerned, there seems to be no lack; but in medicines, there is great cause for complaint.

"III. Inaction. This has proved most injurious to the health of the troops. Accustomed to active lives, when they are shut up in their camps month after month, with no excitement, no stimulus to exertion, nothing to fill up the vacant hours but the tiresome routine of their light daily duties, they become careless, listless, and, after they get into the hospitals, often hopeless. But let an order for marching be given, when there is the slightest prospect for meeting the enemy, and they receive it with deafening cheers; their eyes light up with new enthusiasm; the patients in the hospitals leave their cots, inspired with fresh life, and the sick-list decreases marvelously. All the officers unite in testifying that the health of their men is much better in active service than in the lethargy of the posts."

These remarks, it will be observed, have reference to the post hospitals in the vicinity of Rolla. The want of surgeons is a matter which is not satisfactorily explained. Each regiment has, we suppose, a surgeon and an assistant-surgeon, and each division has additional surgeons. Either the statement of the lack of medical force must be exaggerated, therefore, or a much larger number of the troops must be on the sick list than are reported. We think the writer must have been misinformed. But he adds:—

"Contrary to the general impression, we found the condition of the regimental hospitals better than that of the post hospitals. The atmosphere is much less foul, the accommodations at least equally good, and soldiers there are surrounded by their own comrades, instead of strangers. Colonel Schœffer's, and one or two other regimental hospitals, are warmed by a fire in a trench under the ground, covered with turf, rendering their atmosphere infinitely more wholesome and pleasant than the foul air of the crowded post hospitals."

Another correspondent from Camp Griffin, Va., the camp of the Vermont Brigade, says:—

"This regiment appears quite healthy as compared with the other regiments composing the Vermont Brigade, having at the present time not over twenty in hospital. The 4th, 5th, and 6th Regiments still suffer severely from sickness. In the twenty-four hours I spent at Camp Griffin, four deaths occurred in the 4th Regiment and one in the 5th. I was not at all surprised to find that the 5th had about one hundred and fifty in hospital, considering that they are encamped on the side of a small hill where the ground, so I am informed, is generally exceedingly damp. I found it rather a difficult and laborious undertaking to get about the camps, seeing that the mud is ankle deep, and also taking into consideration that it is the nastiest and most infernal mud that could be contrived or imagined. The whole army of the Potomac may be now said to be encamped in an ocean of mud."

Two-wheeled Ambulances.—Dr. Geo. B. Wilson, Assistant Surgeon of the 3d Michigan infantry, located at Camp Michigan, Virginia, takes exceptions to the two-wheeled ambulance recommended by the medical department of the army as "the best for the dangerously sick and dangerously wounded." He states as his "candid opinion, that not only is the *four-wheeled* vehicle preferable, but that he would consider the conveyance of dangerously wounded men in the two-wheeled carriage *exceedingly dangerous.*" He gives this opinion after having tested the two carriages by actual experiment and experience. In relation to disease in his camp, he writes as follows to the *Boston Medical and Surgical Journal*:—

"Since winter came in, we have had a greater variety of diseases. Pneumonia began to show itself some three weeks ago in other regiments about us. With us, it began only a week ago; or, I may say, it is now commencing, as it appears to be on the increase. We have had a few surgical operations—the extraction of a few balls, some of them the result of accident, and a few received in skirmishes. I do not want to waste your paper with detailed accounts of such wounds. I hope you do not expect that every gunshot wound is worth reporting. I have seen only four since I wrote: one of the finger; one of the wrist; one of the face, the ball entering a little above and outside the angle of the mouth and passing out behind the sterno-mastoid in the back part of the side of the neck. The course was a dangerous one, but no serious harm was done, and nothing was to be learned. In another case, a ball entered near the middle of the rectus femoris—a little above the middle—and was found just in front of the adductor magnus, four or five inches below the ischium, under the skin. It was cut out easily, and no trouble.

"A few weeks ago we had some cases of diphtheria, but they were slight. Several cases of otalgia, terminating in otitis and suppuration, began early in December, and kept coming for some two weeks. Now coughs, colds, diarrhœa, and dysentery, with a good deal of rheumatic pains, are the complaints.

"Our hospitals have been a matter of great interest to the government, the Sanitary Commission, and every one concerned. Fortunately, we have hit on a good plan, and the medical inspectors have told us that we have the best field hospital in the army of the Potomac. Ere long I will give you an outline of it, if I see that it may help others hereafter. At present it is too late for change, and it would not be worth while to burden your pages with useless matter.

"During the months of October, November, and December, the cases of all kinds (no matter how slight, if they were excused from duty,) occurring in the four regiments of this brigade, were thus: Michigan 2d, 1187; 3d, 756; 5th, 816; New York 37th, 853. The leading diseases were: Acute rheumatism, 101; chronic rheumatism, 24; intermittent quotidian fever, 207; intermittent tertian fever, 295; continued fever, 89; remittent fever, 75; typhoid fever, 144; constipation, 221; acute diarrhœa, 573; acute dysentery, 63; acute bronchitis, 132; catarrh, 709. Discharged, 124; died, 14.

"The mean strength of the regiments is as follows:—Michigan 2d, 927; 3d, 917; 5th, 923; New York 37th, 729. There are only eight companies in this last regiment, two being detached."

NEWS AND MISCELLANY.

Dr. Henry Hartshorne, late Professor of Practice of Medicine in the Pennsylvania Medical College, has been appointed Professor of Anatomy and Physiology in the High School of this city. Dr. Hartshorne is well known and appreciated as a gentleman of extensive scientific and general information, and as a medical writer. One better suited for the position could not have been selected.

Dr. Simpson becoming cautious in the Administration of Chloroform.—Simpson, the discoverer of anæsthesia by chloroform, now recommends that chloroform be allowed to fall, drop by drop, on a single layer of handkerchief, laid over the face of the patient.

Ergot in Delirium Tremens.—Dr. O. H. Smith reported, at a recent meeting of the King's County Medical Society, that he once gave, by mistake, to a patient, half a teaspoonful of the strong tincture of ergot, every two hours, for delirium tremens, intending to have given tincture of opium. The ergot put the patient asleep, and, since that time, he has frequently used it as a remedy in delirium tremens. Dr. Smith says that he considers ergot almost as a specific in this disease.

Mr. Syme, the eminent surgeon of Edinburgh, has lately been honored by three European monarchs. The Emperor of the French has made him a Chevalier of the Legion of Honor; the King of Denmark has created him a Knight of the Order of Danebrog; and the Queen of Great Britain has appointed him her Surgeon-in-Ordinary for Scotland.

The Two-wheeled Ambulance.—Great complaint is made by the army surgeons in regard to the discomfort and inconvenience of the two-wheeled ambulance for carrying wounded soldiers. Their motion is said to produce the greatest suffering when used for carrying the wounded over uneven ground.

This practical experience with this form of vehicle is in direct opposition to the official report on ambulances by a committee of army surgeons, who decided that "a two-wheeled ambulance is the best for the conveyance of dangerously sick or dangerously wounded men."

Re-elected.—Dr. John G. Koehler, of Schuylkill Haven, has been re-elected to the post of Consulting Physician and Surgeon to the Schuylkill County Alms House. This is an honorable position, and the doctor's re-election is a compliment to his skill as a surgeon.

The Atmosphere of Sleeping Apartments.—The Paris *Siecle* says that, generally speaking, during winter, apartments are too much heated. The temperature in them ought not to exceed fifteen degrees centigrade, (fifty-nine degrees Fahrenheit,) and even in periods of great cold, scientific men declare that twelve or fourteen degrees had better not be exceeded. In the wards of hospitals, and in the chambers of the sick, care is taken not to have greater heat than fifteen degrees. Clerks in offices, and other persons of sedentary habits, when the rooms in which they sit are too much heated, are liable to cerebral congestion and pulmonary complaints. In bedrooms, and particularly those of children, the temperature ought to be maintained rather low; it is even prudent only rarely to make fires in them, especially during the night. In addition to keeping up only a moderate temperature, the windows of all rooms, whatever the weather, ought to be opened for a time every day, so as to renew the air.

If so, how many?—This question occurs so frequently in the numerous inquiries propounded by the Sanitary Commission that it has given rise to a joke, which is too good to keep. Said one of the surgeons to an "Inspector," after the questions had all been duly answered: "Doctor, will you take a drink?" "Don't care if I do." "*If so, how many?*"

Medical Officers for Canada.—Orders have been received at Chatham, directing Inspector-General W. M. Muir, C.B., principal medical officer of the garrison, to proceed forthwith to Canada to take the medical charge of the troops about to be dispatched to that country. A number of the medical officers attached to the staff at Fort Pitt Hospital have also been placed under orders to proceed to Canada, as well as a portion of the staff of the Purveyor's Department, together with forty men of the Army Hospital Corps. Among the officers named are Dr. J. H. R. Innes, C B., Deputy-Inspector-General of Hospitals, and principal medical officer at the camp at Colchester; Staff Assistant-Surgeons Connell, W. A. Mackinnon, Philip Frank, M.D., T. Dolan, Julius Wiles, A. Macintyre, A. Bryson, W. J. Mullen, J. Anderson, E. Armstrong; and Assist. Surgeon E. L. Hiffernan, 1st Batt. 19th Foot. Deputy-Inspector-General T. D. Hume, M.D., will succeed Dr. Muir as principal medical officer at Chatham. —*Lancet.*

Death of Dr. Southwood Smith.—Dr. Southwood Smith, who died at Florence on the 10th of December, in his seventy-fifth year, was a native of Somersetshire, England. He was a man of great learning, benevolence, and piety, and an ornament of both the clerical and medical professions, to the literature of which he furnished handsome contributions. He was diverted from the former to the latter by the condition of the poor which he visited. He corrected many abuses and made many improvements in the condition of the lower class. His best medical works are on cholera and quarantine; and his best religious, on The Divine Government.

Vital Statistics of Brussels for the Year 1860–61.—The population of Brussels amounts to 174,189, and during the year 4268 deaths were verified, of which number 1141 took place in the hospitals or prisons. The following are the chief diseases to which this mortality was due:—

Phthisis, 788; hydrocephalus, 36; encephalitis, 299; bronchitis, 361; pneumonia, 156; hypertrophy of the heart, 254; enteritis, 440; gastritis, 88; diarrhœa, 4; convulsions, 180; typhus, 135; apoplexy, 139; cancer, 112; croup, 90; variola, 72. Suicides and attempted suicides amounted to 30, occurring in 28 men and 2 women, hanging being the means resorted to in 13 instances, shooting in 4, drowning in 7, cutting instruments in 4, poison in 1, and jumping from an elevation in 1.—(*Presse Belge*, No. 46.)

St. Louis Hospitals.—The whole number of patients admitted into the General and Post Hospitals of St. Louis, from August 11, 1861, to January 1, 1862, was 8676. On the first of January there were 1407 patients in the hospital. The number of deaths during the same period was 532. In the Regimental Hospitals, barracks, and all other points near St. Louis, there were, during the same period, 1044 patients and 61 deaths; in the Post and Regimental Hospitals and quarters, at Rolla, 1468; and in the General Post and Regimental Hospitals (not including quarters) along the line of the Pacific Railroad, 1340. The sick in quarters, we may add, are generally very light cases—mostly colds.

Brooklyn City Hospital.—During the year 1861, 1256 persons received the benefits of the hospital with the following result: Cured, 672; relieved, 220; discharged at their own request, 50; disorderly or eloped, 120; died, 70; number remaining, 124. The number who paid wholly or in part, was 1038; wholly charity, 218; males, 1177, females, 79. Of the 70 deaths, 37 were coroner's cases, (accidents,) leaving the actual number of deaths by disease, 33. Whole number of rations issued during the year, 59,591. Of the charity patients, 173 were accidents sent by the city. The average time of each accident case was fifty-seven days, making for those sent by the city equal to 1400 weeks, which, at $3 per week, amounts to $4227; 520 of the patients were natives of the United States.

A Local Anæsthetic.—Dr. Fournier, of Paris, claims to have discovered a new way of producing local anæsthesia.

The following is from his recent communication on the subject, to the French Academy of Science. He terms the process *Chloracetization*:—

"Having," he says, "subjected a part of my body to the action of the emanations from a mixture of acetic acid and chloroform, I obtained local anæsthesia. The numerous experiments I have since made on myself or animals, and some of my patients, enable me to state the following proposition: If in an apartment, the temperature of which marks more than 17° Centigrade, (63° Fahrenheit,) the orifice of a thin glass phial, containing a quantity of pure crystallizable acetic acid equal to one-fourth of its capacity, and an equal quantity of chloroform, be exactly applied to a healthy and clean skin, not deprived of its epidermis; and if this phial be constantly maintained at the temperature of the hand, a complete insensibility of that part, and some of the deeper ones, will be obtained in five minutes, and at the cost of a very slight sensation of pain. The vapors of acetic acid and chloroform mixed together and applied with a glass retort to a part which it is intended to render insensible, the adjoining parts being protected by diachylon plaster from the action of these vapors, may be employed as anæsthetics in all operations of low surgery, and in many of the higher branches, in all cases where general anæsthesia may be considered dangerous, or declined by the patient."

Hospital Ship.—The schooner Recruit, attached to the Burnside expedition, is fitted up with 440 berths, arranged on two decks.

The following is Senator Wilson's bill for the reorganization of the Medical Department of the Army.

"*An Act to provide for the Reorganization of the Medical Department of the Army.*

"*Be it enacted by the Senate and House of Representatives in Congress assembled*, that the Medical Department of the Army shall be constituted as follows:—

"Section 1. There shall be one director-general, who shall have the rank, pay, and emoluments of a brigadier-general, and who shall, as chief of the medical corps, perform the duties now assigned to the surgeon-general, and such others as may be required by law and regulation. There shall be one sanitary inspector-general, who shall have the rank, pay, and emoluments of a colonel of cavalry, and who shall, under the director-general, have the general supervision of all that relates to the sanitary condition of the army, whether in quarters or in camps, and with the hygiene, police, discipline, and efficiency of field and general hospitals, under such regulations as may be hereafter established.

"There shall be eight sanitary inspectors, who shall have the rank, pay, and emoluments each of a lieutenant-colonel of cavalry, and who shall be charged with the duty of inspecting the sanitary condition of quarters and camps, of field and general hospital, and who shall report to the sanitary inspector-general, under such regulations as may be hereafter established, all circumstances relating to the sanitary condition and wants of troops and of hospitals, and to the skill, efficiency, and good conduct of the officers and attendants connected with the medical department.

"There shall be not exceeding forty surgeons of the first class, who shall have the rank, pay, and emoluments each of a major of cavalry, and who shall ordinarily be assigned to staff, bureau, and hospital duties.

"There shall be not exceeding fifty surgeons of the second class, who shall have the rank, pay, and emoluments each of a captain of cavalry, and shall ordinarily be assigned to duty with regiments.

"And there shall be not exceeding one hundred assistant surgeons, who shall have the rank, pay, and emoluments each of a first lieutenant of cavalry, and who shall perform such duties as are now required of assistant surgeons.

"There shall be not exceeding one hundred medical cadets, who shall not be less than eighteen, nor more than twenty-three years of age at the time of entering, who shall be examined by a board of medical officers, in such branches of medical and sanitary science as the director-general may order. After three years of continuous medical service, and on their producing proper testimonials of character from the medical officers with whom they have served, they may be examined for promotion by a board of medical officers of the army. They shall have the rank, pay, and emoluments of the highest grade of non-commissioned officers of the army.

"There shall be as many hospital stewards as the exigencies of the service may require from time to time, to be designated by a sanitary inspector, on the recommendation of the senior surgeon of the post, division, regiment, or military department where their services may be required, and they shall have the rank, pay, and emoluments of first sergeants of cavalry.

"Section 2. *Be it further enacted*, that immediately after the passage of this act, it shall be the duty of the President to select from the medical corps of the army suitable persons to fill the offices of director-general, sanitary inspector-general, and sanitary inspectors. *Provided*, That no one shall be appointed to either of said positions who shall have attained the age of sixty years.

"Section 3. *And be it further enacted*, that promotion in the medical corps, up to the grade of surgeon of the first class inclusive, shall be by seniority; but that the grades of director-general, sanitary inspector-general, and sanitary inspectors, shall be filled by selections from the whole corps, and by such officers as shall have shown their peculiar fitness for such positions.

"Section 4. *And be it further enacted*, that the surgeons of the first and second classes provided for by the first section of this act shall be appointed from the medical corps of the army as at present organized, and in accordance with the requirements of section third of this act; and that the consequent vacancies in the grade of assistant-surgeon shall be filled by appointment from civil life. *Provided*, that no one shall be appointed an assistant-surgeon of the army, or

promoted to the grade of surgeon of the first or second class, until he shall previously have been examined by a board of army medical officers, and found qualified physically, morally, and in medical and sanitary attainments, for the office, and the adequate performance of its duties.

"Section 5. *And be it further enacted*, that so much of the act of as allows additional rations to surgeons and assistant-surgeons, upon the completion of ten years' service in their respective grades, be and the same is hereby repealed.

"Section 6. *And be it further enacted*, that every medical officer of the army who has attained the age of sixty-five years, or on attaining that age, shall be retired from public service, and shall be entitled to receive the pay and emoluments allowed to officers of corresponding rank by the act of 1861.

"Section 7. *And be it further enacted*, that all acts and parts of acts inconsistent with the provisions of this act, be and the same are hereby repealed."

In connection with the foregoing we give also the bill which it is stated the Sanitary Commission have agreed to submit to the Committee on Military Affairs of the House.

"*An Act to Increase the Efficiency of the Medical Department of the Army.*

"First. There shall be one director-general of the Medical Department of the army, who shall have the grade, pay, and emoluments of a brigadier-general, and who shall, as chief of the medical corps, perform the duties now assigned to the surgeon-general, and such other duties as may be required by law and regulation.

"Second. There shall be one inspector medical-general, who shall have the grade, pay, and emoluments of a colonel of cavalry, and who shall, under the director-general, have the supervision of all that relates to the sanitary condition of the army, and of the hygiene, police, discipline, and efficiency of field and general hospitals.

"Third. There shall be eight sanitary inspectors, who shall have the grade, pay, and emoluments each of a lieutenant-colonel of cavalry, and who shall be charged with the duty of inspecting the sanitary condition of transports, camps, and hospitals; and these offices shall, immediately after the passage of this act, be filled by the President, by selection from the medical corps of the United States army, of such officers as shall have proved their fitness for such positions."

Answers to Correspondents.

☞ We have received a communication, over the signature of "X." upon the subject of the Sanitary Commission, which would have found a place in our columns had it been accompanied with the writer's name. We cannot publish anonymous communications on any subject. The name of the writer must be communicated to the editors, and will remain *incognito* to the public, if desired.

Dr. J. H. E., Iowa.—We know of no work, indicated by the title of "Marriage Guide," which is suitable for any "young married woman" to read. Indeed, the counsels of a mother, or the advice of a well-educated, intelligent physician, are better in such cases than the perusal of any book which treats upon all the ailments of married life. If, however, a book is desired, we can recommend none that is more valuable than "The Mother and her Offspring," written by Dr. Tracy, and published, we believe, in Boston. A book of this description may be safely placed in the hands of a "young married woman." The price and the publication office we will furnish you.

Dr. J. D. C., New Jersey.—We will send you the *Reporter*, *Braithwaithe*, and *Physician's Hand-Book* for $5 50; the *Reporter* and republication of *London Lancet* for $6. The price of the *Dispensatory* is $6, postage paid.

MARRIED.

Barden—Parkins.—On Friday, the 3d ult., by the Rev. M. D. C. Crawford, Wm. M. Barden, M.D., of Mansfield, Tioga Co., Pa., to Elizabeth B., eldest daughter of Mr. Josiah Parkins, of this city.

Craft—Manchester.—In New York, on Thursday, January 30th, at the residence of the bride's father, Dr. E. R. Craft, U. S. A., to Julia, daughter of James Manchester, Esq.

Hatton—Sharp.—On the 16th ult., by Friends' Ceremony, at the residence of the bride's father, Dr. Louis Hatton, of West Chester, Pa., to Miss Anna L. Sharp, eldest daughter of Lieutenant J. W. Sharp, of Camden, N. J.

Meyers—Large.—In Philadelphia, on the 14th ult., by Rev. J. Willis, Dr. William H. Meyers, of Somerset County, Pa., to Miss Maggie A., only daughter of Charles P. Large, of Buckingham, Bucks County.

Osborne—Bartholf.—On the 27th ult., by the Rev. E. A. Osborne, Dr. J. D. Osborne, Surgeon of the 4th Regiment, N. J. Volunteers, to Kate E. Bartholf, daughter of J. G. Bartholf, Esq., all of Newark, N. J.

DIED.

Happersett.—In West Nantmeal, Chester County, Pa., on the 20th ult., Dr. Effinger Happersett, in the 84th year of his age—a practicing physician more than fifty years in the above township.

Hudson.—On Monday, the 27th ult., at Burlington, N. J., Mrs. Maria Hudson, widow of the late Edward Hudson, M.D., in the 68th year of her age.

Wallace.—On the morning of the 27th ult., in the 42d year of her age, Alice Lee, relict of the late Joshua M. Wallace, M.D., and daughter of Dr. Wm. Shippen.

Vital Statistics.

Of Philadelphia, for the week ending Jan. 25, 1862:

Deaths—Males, 114; females, 107; boys, 75; girls, 63. Total, 221. Adults, 83; children, 138. Under two years of age, 72. Natives, 171; Foreign, 39. People of color, 10.

Among the causes of death, we notice—Apoplexy, 6; convulsions, 11; croup, 9; cholera infantum, 0; cholera morbus, 0; consumption, 28; diphtheria, 6; diarrhœa and dysentery, 4; dropsy of head, 2; debility, 9; scarlet fever, 15; typhus and typhoid fever, 8; inflammation of brain, 5; of bowels, 2; of lungs, 19; bronchitis, 4; congestion of brain, 2; of lungs, 1; erysipelas, 0; hooping-cough, 0; marasmus, 5; small-pox, 14.

For week ending January 26, 1861.....282
" " January 25, 1862.....221

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 2570.

Of New York, for the week ending Jan. 6, 1862:

Deaths—Males, 202; females, 188; boys, 114; girls, 105. Total, 382. Adults, 163; children, 219. Under two years of age, 110. Natives, 213; Foreign, 119; Colored, 1.

Among the causes of death, we notice—Apoplexy, 0; infantile convulsions, 29; croup, 15; diphtheria, 6; scarlet fever, 47; typhus and typhoid fevers, 10; cholera infantum, 0; cholera morbus, 0; consumption, 64; small-pox, 10; dropsy of head, 15; infantile marasmus, 12; diarrhœa and dysentery, 0; inflammation of brain, 0; of bowels, 0; of lungs, 23; bronchitis, 15; congestion of brain, 0; of lungs, 0; erysipelas, 0; hooping-cough, 0; measles, 0: 175 deaths occurred from acute disease, and 29 from violent causes.

Population of New York, 814,277. Mortality, 1 in 2131·7.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, Nos. 278, 279. PHILA., FEBRUARY 15, 22, 1862. New Series, Vol. VII. Nos. 20, 21.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

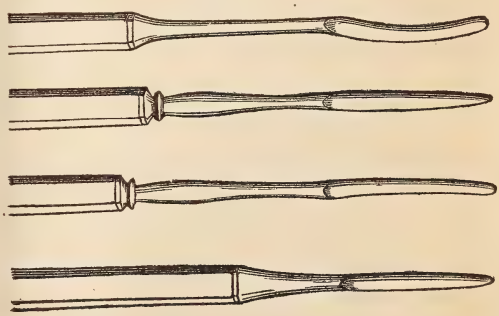
By Louis Bauer, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

These rules are to be so modified as to leave the extremity in the same position, until the tenotome is introduced and has arrived opposite the tendon, if it should be intended to divide the latter from without, otherwise the tension must be kept up until the operation is finished. The extremity is then reduced to its original malposition. The wound must be carefully closed and covered with a piece of adhesive plaster, and the parts kept at rest. We use for the latter purpose a leather splint previously softened in warm water, which we fasten with an ordinary roller. In this state the extremity may be left for three or four days before the after-treatment is commenced. This plan has the advantage of insuring a perfect closure of the wound, and there is no danger of air entering when the parts are subsequently handled. Nor is this apparent delay a real loss of time, inasmuch as the reparative process does not usually commence before the fifth day. If, at the end of that time, the wound be found properly closed, we place the patient once more under the influence of chloroform, and by main force reduce the malposition as far as it can be safely done. In breaking up some adhesions or in tearing some ligaments we risk nothing, since the anæsthesia seems to protect against reactive consequences.

The requirements for the operation are three or four small, narrow-bladed knives, sponges, water, adhesive plaster, a piece of harness leather, and a roller.

The knives have been differently constructed. Some surgeons prefer the sickle-formed, others the straight blades. We use chiefly the latter. A strongly bent sickle-formed blade is certainly not desirable, and a too long and pointed blade is apt to perforate the skin on the opposite side from whence introduced. The tenotomes which we have adopted, and which we now exhibit, have square handles three and three-quarter inches in length, and about as large in size as an ordinary penholder. The knives are of the best English cast-steel, well tempered, narrow but substantial. The neck is one inch and the blade one and one-eighth in length. Some of the tenotomes should be finely pointed; the others may be blunt. We have in our set straight and convex ones, Fig. 14. The last we use for the

Fig. 14.



division of tendons or muscles from without. Blunt-pointed tenotomes we use for special purposes, in order to ferret out more safely deeper-seated tendons or muscles.

Having the extremity placed as directed, and under the control of an assistant, take the tenotome like a pen and insert rectangularly the point through the skin about a line or so from

the margin of the tendon or muscle, the surface of the blade being parallel with their longitudinal axis, until you arrive to the depth of the posterior surface of the same. You then recline the handle and push the knife behind the tendon or muscle until you feel the point on the opposite side through the integuments. The knife is then so rotated as to turn its cutting edge toward the structure to be divided, and by short, sawing cuts, but more by pressure, it is to be thus severed. In the moment that the last fibers yield to the knife, the resistance ceases, and with it the pecular sound that attends it, or, at any rate, that which is heard in the division of a tendon. Having become satisfied that the operation is complete, the knife is to be withdrawn in the same manner as introduced. Otherwise, it is turned against the remaining undivided fasicles and pressed through. For novices, it might be advisable to make the punctured wound through the skin first, and then to use a blunt-pointed knife for the division, which obviates the splitting of the structures. The index finger of the left hand of the operator should then sweep along the subcutaneous wound, with a view to squeeze out air and blood, and to compress the two edges until covered.

The operation thus described necessitates some modifications in certain places, which we shall mention when we speak of the special application, and exemplify them by the operations upon subjects.

The Mechanical Treatment of Talipes.—We have already stated that the hand is by far the best, the most powerful and direct mechanical agent. No mechanical appliance bears comparison with it in efficacy. The more freely it is used in reference to the former, the better is the result and the less inconvenience is caused to the patient. The first handlings of the distorted foot should be made with the assistance of anæsthetics. That spares the patient pain, allows the employment of more force, and protects against reaction. After you have the patient thus prepared, you take firm hold of the leg with one hand and the foot with the other, and by main force you correct the position by bending the foot into the reverse one from that into which it was drawn by the contracted muscles. If you intend to diminish the longitudinal plantar arch, you hold the heel with one and the forefoot with the other hand, and while you thus extend the arch you press with the two thumbs the protruding bones down. In a similar manner you may proceed in reducing the transversal arch, with only this difference, that you press upon the most convex part of the external margin of the foot. These are the general rules for handling talipes, and may be repeated as long as the anæsthesia lasts, or as may be deemed safe and practicable. After a violent proceeding of this kind it may be advisable to allow the member some rest, and to apply cold fomentation for a day or so in order to obviate inflammation; although we have seldom had occasion to resort to them. At a later period, and when the malposition of the bones shows some disposition to yield to the treatment, milder exercises may be made daily once or twice without chloroform. until the malposition is overcome, and every joint moves with ease and normality.

Mechanical Appliances in Talipes.—Much constructive genius has been employed by both surgeons and instrument makers to create mechanical means, combining traction and pressure, with a view of reducing both malposition and distortion of talipes. At a time when the proximate cause of talipes was obscure, and the bones of the foot were supposed to be originally malformed, pressure was diligently applied, and mechanical appliances were of the utmost importance. Almost every surgeon had his own designs, and if we had to reproduce them on this occasion, the various instruments of this kind would fill a large space of this lecture-room. But surgery, and, with it, surgical operations and mechanical remedies, have become more simplified. And in orthopædy, tenotomy has greatly tended toward that end. Nevertheless, we are still in need of mechanical means to reduce talipes, yet with this qualification, that they are no more the chief but merely subordinate and auxiliary remedies, and intended to perpetuate the action of the hand. *They possess no positive curative virtues, but retain the foot in the position in which tenotomy and the acting hand left it.* Their effect is greatly enhanced by the weight of the body and the motion of the joints.

Whatever the construction of those mechanical appliances may be to which we resort in the treatment of talipes, they should possess the following qualities:—

1. They should fit well, and most *accurately* conform to the shape of the member.

2. Their respective joints should be exactly

located with the *axis of the motion* of the joints they are to subserve.

3. Their action should be diametrically opposite the traction of the divided muscles, tending to a reverse form and position.

4. Their action should be steady, and, while applied, uninterrupted.

5. They should keep the foot firmly upon the sole of the shoe, and should not permit the heel to rise from its place.

A mechanical apparatus with these qualities will fulfill its object, whatever its construction may be.

Special Treatment of Talipes.

(1) *Talipes Equinus.*—In the pathology of this deformity we have stated that its proximate cause may consist:—

1st. In a paralysis of the flexor muscles and a mere preponderance of the extensors.

2d. In an active contraction of either the triceps alone, or of the entire group of extensors.

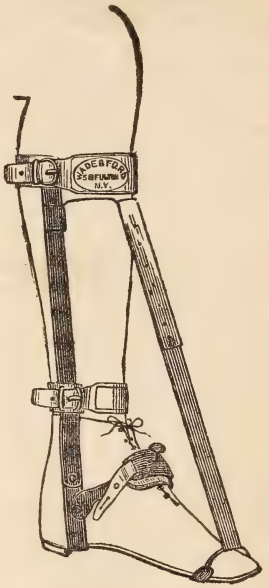
In the former condition, we are able to flex the foot by substituting the hand. These cases are comparatively rare, and if they have commenced as a paralysis of the flexors, they most generally, and in course of time, terminate in active contractions of the extensors, and become therefore identified with the active forms of equinus. In both conditions, however, the growth of the entire extremity is arrested and its length materially diminished.

Before attempting to remedy the deformity, we have to consider the present locomotion of the patient and the changes that would inevitably be produced by the correction of the deformity.

If the deformity be just enough to add to the lost length of the extremity, and renders locomotion perfect, we have no feasible pretext to interfere, in any way, with the trouble—for the deformity is, certainly, the lesser evil, and the usefulness of the limb the higher consideration. On this very ground we have refused to treat such cases. In recent cases, however, we may undertake the treatment with a view to promote the growth of the extremity, and to accomplish, likewise, a perfect cure of the deformity.

If, therefore, a case of equinus is presented with a paralysis of the flexors, we should at once enter upon the treatment of the paralysis according to the general rules we have previously suggested. Next, we should provide the foot with an apparatus, in which the action of the flexor muscles is subsisted by elastic bands, sufficiently strong to balance the extensors. Such an apparatus you see before you, Fig. 15. It consists in

Fig. 15.



a strong shoe, with an iron sole. From the latter, braces arise on either side of the leg, and extend to the knee-joint. At the ankle there are joints which should easily move, and exactly correspond with the axis of motion of the articulation. These braces have two bands, one below the knee-joint, and one above the ankle, to fasten around the leg. At the anterior part of the sole an iron arch should be movably fastened over the foot, and a similar one at the upper portion of the brace. Between the two a piece of India-rubber should be so fastened as to flex the foot. This apparatus will suffice for a mild case. But when the resistance of the extensor muscles is considerable, the heel will leave its place, and thereby defeat the object. In order to prevent this, a leather strap was formerly employed across the instep to keep the heel down. This is a very improper arrangement; for it is inefficient, and interferes with the circulation to such an extent as to become unbearable. In order to obviate the latter inconvenience, and render the action effective, we have constructed a double screw on the principle of the tourniquet, Fig. 16, which we fasten by leather straps to horizontal side pieces affixed to the brace below the ankle-

joint. We look upon this contrivance as exceedingly useful, and almost indispensable in most

Fig. 16.

forms of talipes, because it does away with the rising of the heel, with the interference in the circulation, and may be profitably employed for permanent pressure upon the dorsum of the foot with a view of diminishing the plantar arch. The lower plate of this contrivance should be well padded, and the pressure to be exercised should be regulated so as not to become excessive. If the skin becomes red by the pressure, it should be shifted to another place to obviate excoriation. This apparatus is, in our humble opinion, the best that has been hitherto constructed. The specimen before you has been made by Messrs. Wade and Ford, Fulton St., N. Y., who are certainly very proficient and commendable makers of orthopædic apparatus.

In the active form of talipes equinus, in which you have to deal with active contractions of the extensor muscles, the treatment is to be initiated by tenotomy. The operation is the more effective the earlier it is performed. We have had cases under our charge which have been so completely relieved by the section of the Achillis tendon that, after years, not the slightest trace of the previous deformity could be perceived, the limb having grown as its fellow. If the triceps be alone contracted, the Achillis tendon should be divided at a place from three-fourths of an inch to one inch and a quarter above its insertion—the exact place in accordance with the length of the tendon.

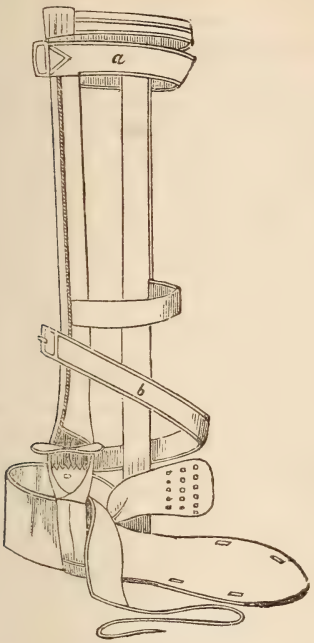
If all the flexors be contracted, the entire group should be divided at the same time. It will be recollected that the tibialis posticus muscle is located immediately behind the internal angle and the malleolus of the tibia; that its tendon at the malleolus lies in a groove, and surrounded by a sheath, and covered in by the aponeurosis of the leg. On account of this anatomical relation, it is somewhat difficult to get the tendon upon the knife. In order to divide it successfully, we proceed as follows: About an inch or a little more above the internal malleolus, we insert a sharp-pointed tenotome through the skin and aponeurosis close to the internal angle of the tibia, and by inclining the handle we enlarge the opening through the aponeurosis. After having withdrawn the knife, we introduce into the wound a blunt-pointed tenotome. We keep it near the bone, and push it between the tendon and the latter. During this part of the operation, the foot is to be left in its original malposition. Having become convinced that the knife has arrived at a proper depth and the tendon successfully placed upon it, we direct our assistant to flex and abduct the foot, and while this is done the cutting edge of the knife is turned toward the tendon and the latter divided. The grating, its sudden cessation, and the yielding of the foot toward abduction are the evidences of a successful division. Otherwise we have to make the operation complete by renewed attempts at catching the rest of the tendon. The posterior tibial artery lies very rarely near the place which we have chosen for the operation, and there is therefore no great danger of wounding this vessel. Graduated compression against the tibia will meet the exigency if the artery be cut.

Fig. 17.

The anatomical location of the two posterior peronei muscles alongside of and behind the fibula, is somewhat similar to that of the posterior tibialis, but their tendons are much more accessible, and therefore more easily to be divided. In reference to the after-treatment, we

have little to add. The instrument just described will suffice. The diagrams on exhibition are the apparatus used by Delpech, Fig. 17, and Scutetten, Fig. 18.

Fig. 18.

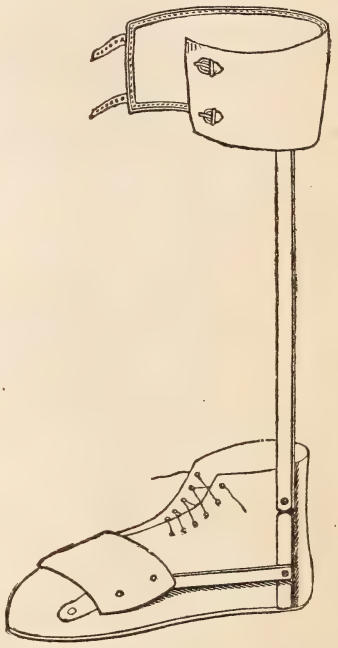


The complications of talipes equinus which occasionally present themselves are, contractions of the extensor longus pollicis, tibialis anticus, and peroneus tertius. The first is the more usual complication, mostly requiring the division of the corresponding tendon. The most accessible places for reaching the tendon for the operation are in front of the ankle-joint, where the tendon lies between the tibialis anticus and the long extensor of the toes, and next behind the capitulum of the first metatarsal bone. No peculiar difficulties attending the operation at either place, we refer to the general directions on tenotomy.

If the tibialis anticus be contracted, the foot is more or less inverted thereby, and the deformity is thus produced which is known by the appellation equino-varus. In such a case, the tibialis anticus is likewise to be divided. The tendon of this muscle descends nearest to the internal malleolus, and can be rendered tense by eversion of the foot. The operation itself is performed immediately below the ankle-joint, and requires no special direction.

The most satisfactory results have been accomplished by us, in first dividing the tibialis muscle and reducing the distortion to the simple form of equinus. We affix to the outside of the leg and foot a straight and well-padded splint, by means of which we draw the foot over to the outer side. In this position we keep it until it has lost all disposition to inversion, and then we proceed with the division of the extensor muscles. During the after-treatment of equino-varus, Scarpa's shoe, as improved by Stromeyer, Fig. 19, should be

Fig. 19.



worn by the patient, and in these lighter cases it will be found beneficial. This apparatus may be greatly improved by combining it with the elastic straps and our double screw for the dorsum of the foot. The latter is the more indispensable if the plantar arch be found abnormally increased.

The contraction of the peroneus tertius will evert the foot and present thereby the complicated form of equino-valgus with more or less the attributes of flat-foot. Inasmuch as we have to devote our attention more especially to this subject hereafter, we beg leave to reserve our opinion at this place, only remarking that the modification in the treatment can be readily inferred.

In fine, if a case of simple equinus be disqualified for operation for reasons already assigned,

and should need an apparatus for concealment, it may be well to acquaint you with our device. We procure a wedge-shaped piece of cork of sufficient thickness behind to fill the distance between the heel and the floor; over this we have the measure of the foot taken and a boot made that has to receive the cork inside, or it may be worked in as a part of the sole. This furnishes a boot which is not so unsightly as the deformity, and with which the patient is enabled to walk with ease and facility.

2. *Talipes varus.*

In this deformity we have to grapple with—

1st. Contractions of the triceps muscles;

2d. Contractions of one or both tibialis muscles;

3d. Contractions of the plantar muscles; and, occasionally,

4th. Contractions of either flexors or extensors of the toes.

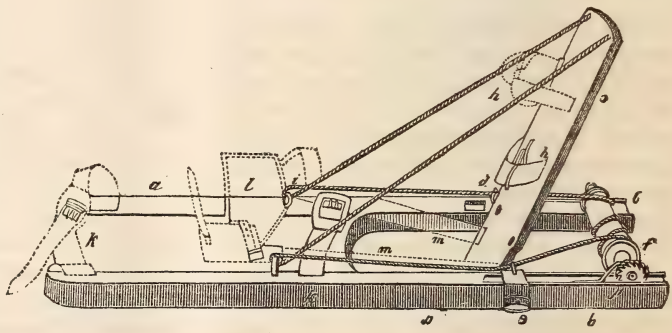
Before entering upon the treatment of varus, we will first discuss the important question as to the proper time to commence it. Inasmuch as by far the larger proportion of varus is of congenital nature, it is consequently noticed immediately after birth. It will be well to test at once the pathological character of the deformity. If the latter should prove to be simple malposition of the foot, and simply caused by the previous position in utero, it will be well to reduce it forthwith, and to keep it adjusted in a proper position for some days. Leather, or gutta-percha splints, as Post uses, are to be so moulded to the extremity as to embrace both sides of the leg and foot.

If, however, the cause of club-foot be found to consist in muscular contractions, the application of splints would be futile. Tenotomy alone can give relief. The proper time to perform that operation is at the end of the first year, when the principal part of teething has passed, and the patient evinces some disposition to stand and walk. Locomotion and standing upon the deformed foot being both favorable to the malformation of the tarsal bones, and therefore highly prejudicial, should not be permitted under any circumstance.

In proceeding with the operation, the general state of health of the child should be good, otherwise the wound might suppurate and thereby peril the final result. The operative treatment of varus should be divided into two parts. At first, the contracted tibialis muscles should be divided, and thereby the varus reduced to equinus, in the manner already indicated. This treatment should be persisted in until the tendency of the foot to inversion is, in great part, overcome. This is still more necessary in varus than in equino-varus, and the result is always satisfactory if this part of the treatment has been extended over a sufficiently long period. Secondly, the Achillis tendon and the plantar fascia with its contracted muscles should be simultaneously divided, because the flexion of the foot and the extension of the plantar arch may be combined by the same mechanical agents. Whether the tendons of the contracted toes may be likewise divided at that or at any later time, is of little consequence. Most usually an undue flexion of the toes is relieved by the plantar section.

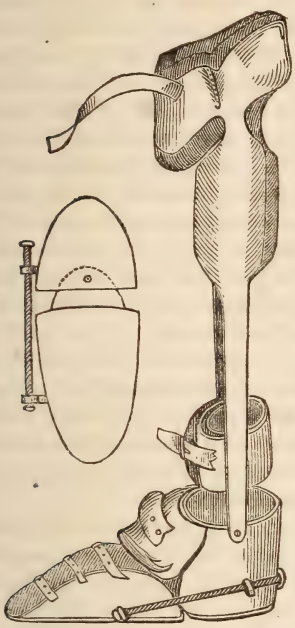
Having thus accomplished the relief of the entire contractions, the manipulations and mechanical treatment fairly commence. We exhibit in this diagram the clumsy apparatus used by Stromeyer, Fig. 20, which is still employed by some surgeons. We cannot advocate its application (although it has pretty nearly all the actions of a good apparatus) for the reason that it is too heavy, that it allows of no fine regulations, and that it obliges the patient to remain at rest. In infants that are to be carried about, it is absolutely impracticable. Stromeyer's improvement of Scarpa's shoe is likewise inefficient. The second boot of Scarpa, Fig. 21, in which the front part of the sole can be turned and regulated by a screw, is somewhat better, yet its action

Fig. 20.



does not comply with all the indications in the mechanical treatment of varus. In using the latter apparatus the whole leg is turned; but the malformation of the foot is scarcely influenced.

Fig. 21.



In fact, among all the existing apparatus for club-foot, there is none that combines all the mechanical actions required. Doctor Ross', of Altona, is comparatively the best, and its construction clearly indicates that the inventor has penetrated the mechanical difficulties in varus, yet it is still imperfect, and deprives the patient of locomotion.

To be continued.

Scientific Explorations.—The Swedish government last year sent a scientific expedition to Spitzbergen. It has just returned to Troruss, whence it started, after having accomplished its mission very satisfactorily in spite of the extreme rigor of the weather. The old maps have been corrected; fresh ports have been discovered; and numerous experiments made which have thrown fresh light on meteorology and natural history. It has been ascertained that animal and vegetable life exists in the sea at a depth of 2500 yards, and that the great current of the Atlantic Ocean, known by the name of the Gulf Stream, reaches as far as the coast of Spitzbergen, pieces of broken wood, bottles, etc., having been found there.—*Dublin Medical Press.*

COMMUNICATIONS.

Report of Three Cases of Otitis Interna successfully treated.

By Laurence Turnbull, M.D.,
Aural Surgeon to the Howard Hospital, etc.

Case 1st.—Martin F., aged seven years, a robust boy, but of a tuberculous family, was attacked with scarlet fever, February 25th, 1858; when visited by the writer the eruption was well developed, and the case required no special treatment. On the decline of the fever and eruption he was exposed to cold, which was followed by anasarca and external otitis; the dropsical symptoms were relieved by free purgation and iodide of potassium; while the diseased ear was treated by leeching and counter-irritation. He was discharged well on the 15th day of March. Was called to see the boy again on the 27th day of March, in great haste, owing to intense pain and swelling, which had occurred behind the ear. On examination, it was found that the pain and swelling, with the giddiness, indicated a case of internal otitis; and the swelling over the mastoid process pointed out that its cells were involved; there was no discharge from the external meatus. He was freely leeched, and anodynes given. On the 28th the swelling was on the increase, and extending to the face and eyes, with symptoms of convulsions. It was then proposed to cut down to the bone, dividing the periosteum, as the only means of relief, to which the mother consented. I, therefore, with a scalpel, made an incision about an inch long behind the ear, and as near as possible parallel with the concha; as the ear was, at this time, almost horizontal, a profuse gush of blood followed, mixed with imperfectly formed pus, and the wound continued to bleed for three days; the pain was much relieved, and by the use of small doses of morphia he was able to sleep, which he had not done since the 27th. A poultice was not applied until the third night, and by the fourth pus flowed freely, which was encouraged; but by the end of the third week the wound had almost closed. A blister was then applied, which opened the wound again, and it continued to discharge for four weeks longer, when it was allowed to close.

January, 1862.—The boy is now eleven years of age, and has enjoyed good health since, being able to be out in all weather; is bright and intelligent, and is at school; his hearing in the left

ear is very fair; his right ear good. Over the mastoid cells there is a depression, of a bluish color, from loss of bone.

In the same neighborhood there is a boy, James R., aged five years, who had a similar swelling after an attack of scarlet fever; it opened of itself after long poulticing, and continued to discharge from the back of the ear for over a year; it then ceased, leaving a deep depression behind the ear, with loss of hearing, the boy being imbecile, and cannot articulate properly.

Case 2d.—Mrs. D., aged thirty-five, applied at the Howard Hospital, July, 1860; she had suffered for three weeks with great pain in the ear and head, with giddiness, the result of cold; she had employed all the usual remedies without relief.

Present condition.—There is deafness of right ear, great heat, redness, and swelling, with pain and tenderness on the slightest pressure; swelling over the back of the ear over the mastoid cells. The external auricle looked forward, being pushed out from the bone. On examination with the speculum, the interior of the meatus was swollen, with intense injection, but no perforation of the membrana tympani. She has fever; pulse 102.

Treatment.—Free leeching, with large dose of calomel, followed by alterative doses of the same drug combined with opium, mustard pediluvia to be frequently repeated.

Three days later she was much improved; the leeching has caused a feeling of faintness, but with relief to the pain; the swelling still continued over the mastoid region; a slight discharge had taken place from the meatus. At times she feels as if she would go crazy when the pain comes on at intervals. While suffering with one of these severe attacks I saw her, and felt fully justified in making a free incision down to the bone, causing a discharge of grumous blood; while, on the following day, pus flowed freely until almost all the redness, swelling, and pain had disappeared; she was able to attend to the usual occupations of her family. She was directed to take hydrarg. bichloridi, one-thirtieth of a grain in a teaspoonful of tinctura cinchona comp., three times a day, with good diet, and to be careful of the cold.*

As she ceased her attendance at the hospital, I called to see her some months after, but did not, as she was about to be confined. I was subsequently informed that she had a return of the pain in the part, with swelling and great distress; a surgeon being called in, he enlarged the wound, and freely applied nitrate of silver, causing the wound again to discharge, but no bone was lost, except in a dissolved state; and after discharging for several weeks it healed up, leaving a distinct depression in the bone; and she recovered her hearing, and is now, January, 1862, well.

Case 3d.—Mary R., aged eight years, a robust-looking child, came under my care early in September, 1861, at the Howard Hospital. She had suffered from scarlet fever of a most malignant type, having been in a state of coma for several days; gradually the coma passed away, when the throat and ears became affected, and the child was a long period before complete convalescence took place.

Present condition.—She is deaf in the right ear, with a constant discharge of offensive pus; on removal, the meatus was found with a white, soft deposit on its surface, with a granular condition near the membrane with a perforation of three-fourths of its size.

Treatment.—A mild wash to be applied of nitrate of silver, while the parts were to be kept clean by repeated injections of tepid water. Counter-irritation was to be kept up in front of the ear. A guarded prognosis was given as to the ultimate result. Having improved considerably she ceased her attendance, and I saw nothing of her until called in haste, on the 21st of September.

The history I received from her father, an intelligent man, was as follows: Sunday, the 14th of September, being a hot day, the child was sleeping on a sofa, when the father, to cool the house, opened both the front and back doors, which produced a strong draught on the sleeping child. After retiring, she was attacked, in the middle of the night, with intense pain, causing her to scream out so that she was unable to sleep; the parents applied a blister and other means of relief, but the relief was of short duration.

When I was called to see her she had but little sleep, crying out with pain, feverish, with alternating chill; pulse 130; with pain all over her head; there was great swelling over the mastoid region, involving the side of the face and eye.

Treatment.—Believing that pus was formed and required an outlet from the mastoid cells, and fearing the result of injury to the brain, I

* This part of the case was published in Am. Med. Times, vol. . p. 169.

divided freely the skin, muscle, and pericranium. On withdrawing my knife, blood flowed very freely. A large poultice of pulv. ulmi et sem. lini was ordered to be repeated every few hours. A saline mixture, containing morphia, was directed to relieve pain.

September 22.—Slept part of the night; pain not so intense; the swelling still continues and has an erysipelatous blush; directed a purgative of calomel, to be followed by ol. ricini in the morning, and through the day to take ℞.—Tinctura ferri chloridi, gtt. x every four hours; as a local application, infusa ulmi flava to the ear and face.

September 23.—Continue treatment.

September 24 to 30.—Swelling less free; discharge from the ear, not from the wound; applied pulv. hyd. prup. cal. to the wound, to increase the discharge.

November.—During this month visited the case every few days. The opening being disposed to close, I introduced a sharp, hollow probe, so as to perforate the surface of the bone, and applied freely the solid nitrate of silver; this increased the discharge of pus.

December.—In the early part of this month the opening was again disposed to close; I again broke down part of the bone, and a small piece was discharged.

To diminish the discharge from the meatus, I directed a weak solution of plumbi acetas after washing out with tepid water; but the stimulation rather increased than diminished it. To remove the diseased bone, I employed a solution of zinci sulphas, one grain to the ounce, to be injected into the opening, and directed internally, in two-grain doses, three times a day, iodide of potassium and sulphate of quinia in solution; at the same time directing a nourishing diet to keep up the child's strength, allowing it to go out only in fine weather.

December 16.—The swelling around the external wound was very great, and a profuse discharge of pus took place for the last three or four days; while the discharge was very slight from the meatus.

On the 19th, a large piece of sequestered bone was found by the probe to be movable, and by enlarging the wound was removed after some difficulty, the bleeding being very free.

Two days after the operation the wound healed, and the discharge ceased from the wound. There is a deep depression behind the ear, from the loss of bone, but the child is well.

The bone measures six-tenths of an inch in length, and three-tenths of an inch in width. It is now in my collection, and has been examined by several distinguished physicians and surgeons. In the cases above related, which might have been increased by others, but whose history was more imperfect, we have examples of three forms of this troublesome and painful affection, and it will be seen that the treatment was different in each case.

In the first, the simple division of the periosteum, with the subsequent application of the blister, was all that was necessary to complete the cure.

In the second case, it required the second enlargement of the opening and the breaking down of the bone by the application of the nitrate of silver.

The third was a case of great danger to the patient, and it involved a larger number of the larger cells of the mastoid process; it therefore required free perforation of the bone, and its removal in a diseased state.

This is the first operation of the kind that has been performed in the United States. It has been performed eight times in Europe. The notes of his own case and the other cases, and the reasons for it, are given by Dr. Von Troeltsch, aural surgeon of Wurzburg; but my operation was performed before seeing his report of cases, and was devised and executed under pressing necessities; but so severe an operation is not required in all cases.

Dr. Von Troeltsch* recommends the operation of the perforation of the mastoid process in "otitis interna." He believes the disinclination of surgeons to operate is due to their considering diseases of the ear as exceptional complaints, for the treatment of which special rules are required. Dr. Von Troeltsch, however, strongly objects to such reasoning. The cells of the mastoid process are in open communication with the cavity of the tympanum; they are covered with the same mucous membrane, and participate in all the affections of that cavity. Pus accumulates the more readily in these cells, as their communication among each other and with the anterior part of the middle ear is often very narrow, so that the pus is easily shut in; besides which, a large portion of the mastoid process lies deeper than the membrane of the tympanum and the meatus auditorius. The membrana tympani may,

* London Medical Times and Gazette, September 20, 1861.

therefore, be perforated, and the secretion of the cavity of the tympanum may be allowed to freely escape outward; and this will, nevertheless, not provide an outlet for the pus within the mastoid process. If the matter which is accumulated there does not spontaneously make its way outside, by the formation of a fistula behind the ear, which sometimes occurs, the surgeon has no choice but to break through the external layer of the bone in order to gain access to the seat of the pus; so much the more as the introduction of warm vapors into the Eustachian tube has no decided beneficial effects in severe cases, although in mild forms of this affection frequent gargling and repeated blowing in of air into the tube, by means of a catheter, may serve to prevent the case from getting worse, and may act favorably altogether.

If the bony layer which has to be perforated is very thin and fragile, an ordinary buttoned probe will answer the purpose; but if such is not the case, a hollow chisel ought to be used. Dr. Von Troeltsch also says that in every case an incision about an inch long, behind the ear and parallel with the concha, ought to precede the perforation of the bone as laid down by Dr. Wilde, of Dublin. Such an incision always produces a favorable result, the bleeding being considerable. *The chisel should then be inserted in the middle of the incision, at an equal height with the opening of the ear, and ought to be carried horizontally and a little forward.* In this way the dura mater and the sinus transversus are avoided, and the surgeon rapidly arrives in the large cells which are closed above and behind the cavity of the tympanum. The incision itself had better be made three or four lines behind the insertion of the concha, as, if it were made further forward, the posterior auricular artery or its branches might be wounded; and if the incision is made further back, there is the danger of touching the sinus transversus with the chisel. The instruments must of course be used very gently and with interruptions, in order to allow of cleaning the wound and probing, just as during trepanning, and also to avoid a sudden piercing of bone.

Mr. Toynbee observes that

"Perforation of the mastoid process suggests itself, (in disease of the mastoid cells in the adult,) and this operation may doubtless be performed in those cases where the matter is pent up in the cavity of the ear and is causing such urgent and serious symptoms as are likely, if not relieved, to terminate in death." But adds: "I have never performed this operation, but I would not scruple to do so in a case where the life of the patient was threatened."

The same authority shows the fatality of this disease, by its not only producing diseases of the brain by the extension of the inflammation, but also by general cerebral irritation. He reports the history of three children, with the autopsy, who died under his care, and one of W. Willing's. One adult under Dr. Brinton at the Royal Free Hospital. who died from acute inflammation of the mastoid cells three weeks after an attack of scarlet fever. He also reports eight cases, one of his own and seven collected from various other physicians and surgeons, where death occurred from disease of the mastoid cells followed by purulent infection or disease of the cerebellum or its membranes. Under the head of "Necrosis of the Mastoid Process," he reports two cases of recovery after the removal of the dead bone.

Great credit is due Mr. Wilde for his suggestion of cutting down upon this bone, and thus facilitating its removal either broken down in the pus or in a diseased state; but should the surgeon not assist in this operation, more especially after childhood, he will frequently find his patient dying from extension of the inflammation or irritation to the brain, before the dead bone is discharged; therefore the operation of perforation is justifiable.

Case of Depression of the Skull, with Epilepsy, temporarily relieved by Trephining; with Remarks.

By A. G. Walter, M.D.
Of Pittsburg, Pa.

The history of the following case, similar with regard to the indication for trephining and its results to that reported in the *San Francisco Medical Press* of October, 1861, page 229, cannot fail to be of interest, as it exemplifies the absence of certainty and reliability of the two most prominent symptoms for diagnostic purposes, namely, *depression* of the skull, and *pain* produced by pressure upon the part depressed, which justly demand, when followed by epilepsy or other cerebral symptoms, prompt surgical interference. Such has ever been the experience of surgeons, that no one would hesitate to trephine, if the above symptoms should present themselves. Yet success, generally so certain,

has at times, even under otherwise favorable conditions, been wanting. Trephining has failed to afford either temporary or permanent relief in those instances where it was found that depression of the skull was only *superficial*—free from bulging inward, or any other lesion of its inner table, (either fissure, fracture, or bony excrescences,) and uncomplicated with morbid products, such as have been known to grow from the dura mater after the receipt of injuries. That a portion of the skull may appear deeply indented on its outer table, and yet show no signs of depression on its inner plate, is readily explained by the fact that both plates of the cranium will encroach upon each other under the force of blows inflicted upon it, the diplœ thus suffering first compression, and later absorption. But if with tangible depression no encroachment of the tables of the skull be detected, the diplœ being found normal, there can be no other cause for it assigned but absorption and condensation of the cellular tissue of the scalp, the effect of the local primary injury. In the former instance there is depression of the outer plate of the cranium; in the latter, the bony vault is uninjured, the scalp alone having suffered in its areolar composition.

It is of great importance, therefore, to appreciate this distinction between *cranial* or real, and *integumentary* or apparent depression, as a guide for proper diagnosis and treatment, as well as a means of assisting justice to be rendered in criminal prosecutions for alleged injuries to the skull and its contents, when no real ones would exist in either; apparent depression, the result of cellular absorption and thinning of the scalp, being the only palpable symptom denoting injury which had previously been inflicted.

Yet that *acute pain* should be provoked by the pressure of the finger on the depressed portion of the skull, its bony vault being otherwise normal, as was observed in the case to be narrated below, cannot be so easily accounted for, but may be due to irritation from constriction of nervous filaments imbedded in the condensed areolar tissue of the scalp.

John B., aged twelve and a half years, born of healthy parents, with a strong frame and well-developed muscles, yet quiet and reserved in manners, had been weakly during the first two years of infancy. The process of teething was disturbed by cerebral congestion, evidenced by jerking of the head forward, protracted otorrhœa, with scrofulous enlargement of the glands of the neck. Recovering, however, he passed the following years in comparatively good health, and grew strong. About four years ago, while at play, he received a blow on the back part of the head, prostrating him senseless, and causing a severe wound; no unpleasant symptom, however, followed. A year later he again was struck with a shinny-block on the left side of the head, and knocked down, but recovered, after a few days, without any ill effects being observable. Two years afterward, (July, 1860,) however, symptoms made their appearance indicative of disease of the brain. He was then noticed, while standing, suddenly, without any previous warning, to have his face spasmodically drawn to the right side, with eyes staring and eyelids twitching, and then to the left, when the spell, after about half a minute's duration, would abruptly cease, with immediate return of the mental functions. These fits, at first recurring only every two or three weeks, and of but momentary duration, and attacking the patient in any position and at any time, though generally in the forenoon, and even during sleep, always sudden in their invasion, in course of time became more frequent, more severe, and lasting longer. Latterly he has had two or three seizures in one day, but generally two in a week, some more severe than others, when the whole body would be convulsed, with limbs stretched, stiff, and jerking, teeth set, mouth foaming, eyelids and muscles of face twitching, carotids violently throbbing, the face assuming a purplish hue. Vomiting used to follow the speedy return of consciousness after their subsidence, but recently there is absence of vomiting, yet protracted coma and stupor, out of which the patient awakens with yawning, complaining of severe prostration, giddiness, and aggravated headache. There is no aura epileptica, nor any exciting cause observable. His general health did not appear to suffer, appetite rather too good, alvine evacuations natural, secretion of urine copious, and excretions frequent. His sleep, however, is disturbed by restlessness, moaning, grinding of teeth, and screaming.

Such being the history of the case, examination of the head, being of rather large size, revealed a marked depression of the left parietal bone at its summit, the part originally struck some years ago, with exquisite tenderness under the pressure of the finger. Color of face florid, pupils natural, conjunctiva palpebrarum freely injected, action of right carotid unusually strong, heart's action normal in force and frequency.

There being no hereditary tendency, no disease

of any other organ discoverable, helminthiasis too being absent, it was justly inferred that, as the skull showed such evident marks of injury, trephining would offer the desired relief. Acting under this conviction, on August 22, 1861, the patient under the influence of ether, a free crucial incision was made over the painful and depressed part of the left parietal bone, through the scalp. The flaps being reflected, the pericranium was found very loosely attached to the skull. Free arterial bleeding followed this step of the operation. Vomiting and violent congestion of the face having set in, etherization was stopped, and the removal of two large pieces of bone accomplished, while the patient had recovered consciousness. The diploe, bleeding considerably, was found highly injected and in large quantity between the two tables, thus increasing the diameter of the skull to an unusual size. There was no depression, fissure, fracture, spicula, or bony excrescence perceptible on the inner plate, but deep sulci, produced by the enlarged and tortuous vessels of the dura mater; the outer plate, too, being free of indentation. The dura mater was seen highly injected, adhering closely to the skull, and bulging outward in violent throbbing motion through the cranial opening; its color and structure appearing normal, no morbid products growing from its surface. Bleeding having been arrested by iced water, the flaps of the scalp were replaced, and prevented from falling inward upon the dura mater by silver sutures passed through their corners. The head was kept elevated, and cool by iced bladders.

Though the immediate result of the operation, in the absence of all tangible traces of irritation to the brain and its membranes, was not encouraging, still it was hoped that relief would eventually follow, by having given vent through the cranial openings to the brain, which, with its turgid membranes, appeared to have been incarcerated in a bony wall of unusual thickness, and thus unduly compressed and irritated.

Diet and regimen of a strictly antiphlogistic character having been observed, reaction was moderate; the pulse even below the natural standard in force and frequency. Next morning, after a quiet sleep, the patient being gently raised, there were signs of a returning fit, as the head began to turn involuntarily, which, however, quickly disappeared. In the afternoon a chill set in, followed by high fever, thirst, startings, pain between the eyebrows, rapid pulse, and violent action of the right carotid. Blood was drawn freely from the arm, and from the forehead by leeches, and tinct. veratr. was ordered. The arterial excitement subsiding, he continued in a comfortable condition, with natural and quiet sleep, moderately accelerated pulse, and all the functions normal, till the fourth day; in the afternoon of which, two slight, short fits appeared, with turning of the head and jerking of the body, at a time when he was raising himself for a drink. The wound in the scalp suppurating duly, the patient left his bed in a few days after, all excitement about the brain apparently having subsided, as was evidenced by the pale color of the face, the less strong action of the carotids, the weaker pulsation of the arteries of the brain, the natural pulse, the sound and undisturbed sleep, and the absence of headache, which, before the operation, was so constantly complained of; appetite, too, and the evacuations being normal, and the wound being nearly closed, there was ground for hope that the fits, though having reappeared probably as the effect of impressions left on the brain, might gradually become less frequent, and eventually disappear. These anticipations, however, were not realized. Notwithstanding the protracted use of the tinct. veratr. (Norwood's.) with strict antiphlogistic regimen and diet—the system apparently in a healthy condition—the fits returned generally twice a week, attacking the patient suddenly, while standing or sitting, with loss of consciousness, and convulsive movements of the face and extremities. They are not at present so severe or lasting as before the operation, yet regular and violent enough to preclude all hope of ever yielding to the influence which was expected from trephining. Some time after the operation, on examination of the vertebral column, there was perceptible tenderness felt on pressure of the cervical vertebræ in their middle. Pustulation was produced here, and kept up for some time, but without any benefit accruing. At the present time—more than five months after the operation—the patient continues in good health, free of headache, but unrelieved of the epileptic seizures.

Unsatisfactory as the result of the operation has been in the foregoing case, the lesson taught by it is worth remembering, increasing in interest by a review of the following facts. There was marked indentation of the skull at the part struck; strongly simulating depression, either of both tables of the cranium or of

the outer upon the inner one, which was followed by epilepsy; acute pain, produced by pressure with the finger upon the depressed portion of the parietal bone; absence of traces of injury to the bony wall, on its outer or inner face; unnatural thickness of the skull, by increased growth of the diploe, with its congestive condition; congestion of the dura mater, its protrusion into the cranial opening after trephining, with violent throbbing of the arteries of the brain; temporary relief from trephining, at least as long as the wound was suppurating; and cessation of a protracted cephalea—the permanent benefit of the operation.

That the headache should have so completely yielded in consequence of the operation, while the fits, after a temporary respite, returned, may, for want of a better interpretation, be considered due to the partial liberation which a turgid and massive brain incased, nay, incarcerated in a bony wall of unusual thickness, had received by trephining, and to the concomitant and subsequent disgorgement of the blood-vessels of its substance, and of the membranes by bleeding and suppuration. But as the opening made by the trephine was not large enough to give full expansion to the brain, as the skull, on account of its hypertrophied condition, was incapable of accommodating itself to the increasing growth of the cerebral mass, and as the emptying of the congested cerebral vessels ceased with the subsidence of suppuration and with the consolidation of the wound of the scalp, it was to be expected that compression and irritation of the substance of the brain would be renewed, and with it the convulsions reappear.

That the blows which the cranium had previously received were severe enough to induce a slow congestive condition in the brain, yet growing in a vault originally large from scrofulous taint, and that this undue afflux of blood contributed to the increase of the bony wall in thickness, and subsequent resistance, will readily be admitted.

Taking this view of the case, it appears more than probable that *incarceration* of the brain, still expanding in a hypertrophied skull, by which it remains compressed, irritated and unduly congested, is the sole *cause* of the continuance of the epileptic fits, and that no other relief, unless by nature's own accommodating resources, is left but a *more extensive removal of the skull* by the trephine, through which a larger surface of the brain could find expansion and thus be freed of irritation.

Bold as this proposition may seem, it is fully justified not only on account of the comparative harmlessness of removing large portions of the skull, but more especially on account of the improbability of ever affording succor to the patient in his present affliction by any other means in our power. As temporary cessation of the convulsions were observed to follow the partial liberation of the brain by the trephine, and in consequence of the disgorgement of its blood-vessels and of those of the membranes by subsequent bleeding and suppuration, and as permanent release from pain has been gained by the operation, the cephalea being, like the convulsions, a symptom by which the compressed and congested brain appealed for relief, it may be just to infer that its congestion would gradually subside, and with it irritation; and that the convulsions would eventually cease, provided a *more free vent* was given to the brain for its expansion by an extensive removal of its bony walls.

Compensatory Art.

By B. Frank Palmer,
Surgeon-Artist.

Surgical science has hitherto held, as by the law of primogeniture, the long-conceded right of precedence and pre-eminence over its inseparable ally, subsidiary art.

To establish systems and teach important truths *within the exact circle of medical and surgical science* has been the work of professors, while the important auxiliary and connecting link in the chain of beneficent agencies, *compensatory art*, has been almost wholly ignored as a lower and comparatively unimportant branch, to be conducted as the most incompetent artisans, entirely ignorant of anatomy and even of the laws of mechanics, might deem proper. Thus a profession which theoretically claims equality with the highest in the range of surgical and collateral science, has been degraded to the level of the lowest mechanical vocation, and, indeed, finally left without "a local habitation and a name." In the range of the superior arts, perhaps there is *none* in which high originality of design and masterly ability to execute are more imperatively demanded than in the faithful and efficient discharge of the duties of this profession; yet, in none has there so long existed a

palpable manifestation of *utter ignorance*, as in devising, constructing, and applying automatic mechanism in reparation of lost parts of the human body. Even so late as the year 1846, (when I first introduced the self-acting artificial leg,) there was not to be found on record, in the English language, a description of any substitute which could properly claim the name of a limb. I had, therefore, to commence the invention with but very little to guide, except unsightly and inadequate appendages, which, being the *terror* rather than the comfort of the unfortunate, served at best only to show the course that must *not* be pursued in the labyrinths of discovery. How well I succeeded may be inferred by the perusal of the scientific reports. I had no model indicating external comeliness or symmetry to imitate; no internal mechanism giving adequate action; no articulations resembling the natural joints to suggest *improvement;* but, on the contrary, (to divert from the legitimate pursuit,) an untold number of grotesque and nondescript appendages called "cork legs," and constructed variously of iron, steel, tin, copper, brass, sheet-iron, gutta-percha, india-rubber, leather, wood, and indeed every workable material except *cork*, showing almost an infinite variety of impracticable devices, which, having fallen into disrepute, indicated but poor promise to the copyist who would attempt to improve any of them, and, perhaps, *poorer still* to the inventor, who, discarding them all, should attempt to construct on a radically different principle, copying Nature's mysterious mechanism, the complexity of which remained alone uncopied in its functions, and seemed to defy artistic imitation. Without a single important and practical advance *upon a sound basis*, and with no reliable scientific guides, the task seemed, indeed, unenticing in its character and unpromising in its results.

To imitate successfully a human member (so beautiful in its external form and complex in its internal mechanism) with inanimate bones, muscles, tendons, and cuticles, requires no small degree of anatomical, surgical, and artistic knowledge. The surgeon who *skillfully* removes the obnoxious limb, and the surgeon-artist who *successfully* repairs so great a loss, should be regarded as filling offices of co-ordinate importance, and each should be the colleague of the other. This, however, can only be the case when the latter is fitted by education for the responsibilities of the profession—an education not easily obtained, as the knowledge is taught neither in books nor in medical colleges. It is worth the attention of the medical faculty. Is it not strange that a subject of such paramount importance should have been so long neglected in the halls of learning? From the medicine-god *Æsculapius*, or later, from the immortal Celsus, or later still, from the learned and beneficent Paré, or from some contemporary *mechanicians*, it would seem that we might have derived *some* reliable instruction in the *correct method of supplying lost members*. But such is not the case. On the contrary, the rudest possible form of a substitute, the simple peg, has been allowed to indicate the place of amputation for *its* uses, and thus, strange though the statement seem, (its truthfulness is more so,) many eminent surgeons since the time of the illustrious Paré have obsequiously followed the advice of a certain *Captain Clerk* of *that time*, and *not* the advice even of the great surgeon. Paré said, "you shall cut off as *little* of that which is sound as you possibly can," being governed, however, "by the action of the rest of the part," which often changes this counsel, for you shall so operate that the "patient *may most fitly use the rest of his leg by walking on an artificial one.*"

The *wooden peg* was the only useful substitute known in that age, and it appears that Paré adopted the old "place of election," at the instigation of *Captain Clerk*, who, having had a foot shot off by a ball passing through the ankle, "caused the rest to be cut off some five fingers breadth below the knee," in order to flex the joint and place the knee on the socket of the peg in such a manner as to *conceal the end of the stump*. This fact will show that though the art of supplying such losses was not understood, yet the wisest of surgeons have always amputated with reference to this ulterior treatment. It establishes the law of mutual dependency between surgical science and compensatory art, and shows that it is only by the harmonious blending of the two offices that the future happiness of the patient can be secured.

Art is, therefore, the potential ally of science in works of human benefaction, and it is *proper*, as well as *essential*, that they should go hand in hand. And so they will, as there is an essential fitness of all things, and, in the proper time and place, men and their works find their true level in their respective positions.

The present is an age of *inventions, wars*, and

exhibitions. The International Exhibition in London was an epoch in the world's history which disclosed the sinews of power in the arm of the useful arts. The inventor and the artisan were then, for the first time, duly honored, and their *rights* fully conceded. If I were to express my personal feelings, I should unhesitatingly say that my efforts have been fully appreciated, and my successes generously acknowledged, while there seems to exist, on the part of my patients, a desire to justly remunerate my arduous labors.

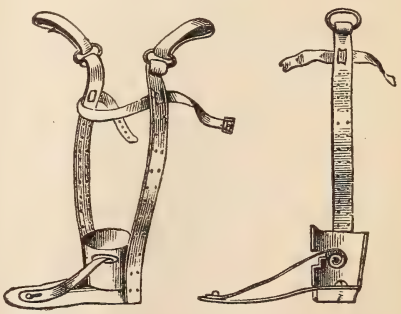
I have spared neither time, pains, nor money in the prosecution of my design; I have solicited investigation and competition before every scientific society and exhibition where such an invention could have an impartial examination and award; I have displaced all other forms of artificial legs to apply this; I have treated every conceivable form of amputation, until *over three thousand* of these limbs are in daily use, and at this time there is demand for about four hundred to be made annually. To be prepared to the utmost for so liberal a patronage, I have secured every facility discoverable by the study of works on surgery and anatomy, by visiting various medical colleges, hospitals, and scientific institutions in this country, also in England and France; and I have become familiar with all the forms of mechanical limbs which have the least practical value or reputation.

Without a desire to disparage the *laudable* efforts of others, I would direct the considerate attention of surgeons, and the unfortunate, to the *results* of all this research and labor.

I commenced the work distrusting my own ability, and but half appreciating the value of the invention. I have been, all the way along, encouraged by finding the limbs better and more satisfactory to my patients than I, in all the enthusiasm of the first accredited success, dared hope for. This has given, at length, an abiding confidence in my ability to do all that the present light of science and art enables man to do in restoring the lost parts of the human body which I attempt to supply. It may be that the series of discoveries in which I have been for the last sixteen years progressing is *unending;* if so, being always desirous of proving the works of the present imperfect by *producing those which are better*, I shall *work* on, and *plan* on, hoping, while in the midst of such facilities as were never before enjoyed by any in the profession, to keep pace with the march of discovery in the agencies of human amelioration. It must be obvious to all that a practice so extensive cannot fail to offer the utmost advantages.

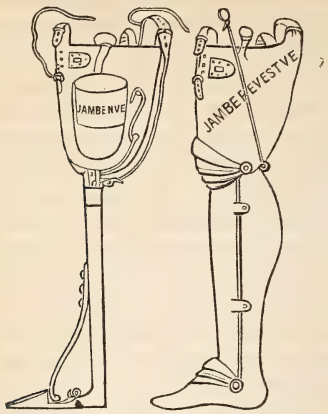
For the benefit of surgeons who are not permitted to listen to the instructions relative to amputations as *now* given by distinguished professors, I would say that the rules I have established—published in the *Bane and Antidote*, which is gratuitously distributed—are generally adopted by the medical faculty. I have already, as the result of my efforts in this direction, had the pleasure of treating *hundreds of long and beautiful stumps, perfectly adapted to the best forms of substitutes*, in cases where a lack of this necessary knowledge on the part of the surgeon would have left the sufferers *hopelessly* without the *best* use of false limbs. The heartfelt gratitude expressed by my numerous patients, in such cases, gives the most ample and gratifying reward.

I have constructed at least fifty varieties of arms and legs, each one of which might be termed an invention; but I have found much more to *reject* than to *adopt*, in the way of novelty. While thus pursuing the doubtful labyrinths of discovery, I have for years refused to construct the arm for my friends, even at excessive prices. I have now made apparent the affinity that exists between operative surgery and compensatory art, and believing that in all coming time there will be a harmonious interchange of correct theoretical views, as well as practical co-operation on the part of the two operators, the patient may confidently expect to reap largely the growing benefits to be derived from the united skill and ingenuity of the surgeon and the surgeon-artist.



The *cuts* herewith shown have been prepared by my direction. They give a good idea of the

best artificial legs known in the time of the great Paré, (about 1560,) and require no explanation.



In my next communication, I will present specimens of more recent devices, and will soon publish some of the most interesting cases in my practice, especially those in which limbs are lost in battle. I am now daily treating such cases.

Bark of Pomegranate Root as a Remedy in Tape-worm, (Tænia Solium.)

By Henry R. Tilton, M.D., U. S. A.

It is with great pleasure that I can bear testimony to the efficiency of a properly prepared extract of the bark of pomegranate root in the treatment of tape-worm.

Three casss have occurred recently among the troops at Key West Barracks, where I have been stationed. Previous to their arrival at Key West, the soldiers had been stationed in Texas, where, as I learned from the hospital-steward, Mr. Arnold Stubb, the tape-worm is quite common. The hospital-steward further informed me that a druggist in San Antonio, Texas, prepared a solid extract from the bark of pomegranate root, which was a black, tasteless powder, and very effectual in the cure of tape-worm, as numerous cases within his own knowledge, both among citizens and soldiers, proved. The druggist would not tell how he prepared the solid extract, having it labeled "Ext. Granati," and selling it to citizens for $7, and to the army for $5 an ounce. He condescended to inform the steward that it was prepared from the bark of the root; his label conveying very little information. Mr. Stubb, who has served as hospital-steward in the army for eight years, and is quite a practical chemist, has tried to make this extract, using alcohol, water, and ether as menstrua; as yet he has not succeeded; but he found a fluid extract just as effectual in removing the worm. This he prepares in the following manner: Take ℥ij of the bark of pomegranate root, and put it into Oj of very strong alcohol; let it stand fourteen days, filter; then evaporate the alcohol, leaving the water of the alcohol combined with the active principles of the bark. This watery extract measures from f℥iv to f℥vj, the quantity being governed by the strength of the alcohol, while of the solid extract only ℥j is required to destroy the worm; but the fluid extract is much less bulky than the decoction, and has three times the amount of bark used in its preparation.

One great recommendation of the extract of pomegranate root is the short preparation which the patient has to undergo before relief is obtained. The whole treatment occupies less than twenty-four hours. The patient takes a purge in the afternoon—either castor oil, salts, or any cathartic which the physician may select; he abstains from supper and breakfast, and then begins with the fluid extract, taking one-third of the whole quantity at a dose, which is to be repeated every hour and a half, or two hours. This generally acts upon the bowels within a short time after the third dose is taken, bringing away the entire worm; if it should not act before twelve o'clock M., a purge is to be given.

Of the three cases under my care, only one took the second purge. Sometimes there is slight nausea, either from the medicine or the movements of the worm; this is promptly relieved by a teaspoonful of vinegar, administered in cold water. The last case occurring under my notice was an interesting one. The patient had been complaining more or less for eighteen months, and while in Texas had taken large and repeated doses of oil of turpentine without effect. He entered the hospital in the afternoon, and was treated as I have described above; an enormous worm was discharged next day before twelve o'clock M., and the patient immediately returned to duty. After soaking twelve hours in cold water, (causing considerable contraction,) the worm measured seventy-five feet ten inches in length. The three specimens are preserved in alcohol.

Appointment.—Dr. C. F. Winslow, late of Boston, has been appointed U. S. Consul at Paita. Dr. Winslow has recently held the office of Physician to the Hospital at Callao.

Illustrations of Hospital Practice.

PHILADELPHIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. Da Costa.

January 25, 1862.

BRIGHT'S DISEASE—ENLARGEMENT OF LIVER.

This was the case of C. R., aged thirty-five; German; shoemaker; temperate in his habits; in good health until six years ago, when he had a swelling on the right side of his chest, which discharged. For three weeks he had purulent expectoration, attended with cough. During the last summer he noticed the swelling of the abdomen. Let us examine this patient as he now presents himself. His countenance is pale, waxy, and wears an aspect of suffering; his pulse is 62, and intermits at every eighth or ninth beat; tongue clean, color tolerably good; cheeks slightly flushed; chest clear on percussion; small bubbling sounds, and moist râles in lower portion of left lung, both anteriorly and posteriorly; heart impulse extended but feeble, first sound excessively feeble and blowing, second feeble but distinct; abdomen distended; liver enlarged, extending considerably below the margin of the ribs; spleen slightly enlarged; superficial veins of abdomen enlarged and prominent on the left side; urine moderately high colored; specific gravity low, 1014; test by acid causes deposits with considerable effervescence, very little albumen; microscope reveals tube casts and urates. We have here, then, a case of Bright's disease, with enlargement of the liver, in which, perhaps, the renal affection is subordinate to the hepatic. There is only slight pain and tenderness over the kidney, but the absence of really severe pain is worthy of notice. We may, indeed, have serious chronic disease of the kidney, without marked pain, or the pain may be referred to other parts of the body. And this may be a significant point in differential diagnosis, for in nephritis or acute inflammation of that organ pain is always present, and is confined to one kidney. The cerebral symptoms become more prominent when the urine is scanty, but are generally quite strongly marked in this disease, and for the reason that some constituents of the urine (the urea, for example) is retained in the blood, giving rise to drowsiness, delirium, coma, death. Amaurosis and paralysis are, sometimes, the results also of this disease.

Another point of clinical interest here is the fact that disease of the heart leads to disease of the kidney, and *vice versa;* so disease of the kidney leads to dilatation of the heart, and it is explained in this way: when the kidney becomes diseased the circulation of the blood in the organ must, of necessity, suffer, and the vessels leading to it become engorged; the heart then takes on increased action to send forward the accumulating blood. This endeavor to overcome an obstacle leads to dilatation of the cavities, if the patient be cachectic or anæmic, or to hypertrophy of the walls, if he be strong and robust.

And then, again, as to the condition of the blood. There is no disease which so rapidly impoverishes the blood as this. Abnormal products, which in a healthy state of the organs are eliminated from the system, are retained in the blood, and the red corpuscles are thus destroyed.

The prognosis in this disease is unfavorable, especially if the case be of long standing. Cases, however, of acute Bright's disease often recover, for example, those following scarlatina. How will you distinguish between the acute and the chronic? By the history of the case, and by examination of the urine. In the latter variety the specific gravity is low. In the former it is high. It is also high colored, and has a smoky appearance. Under the microscope large quantities of blood corpuscles, tube casts, and epithelium are visible in the former, while in the chronic the tubes appear often naked; there are no blood corpuscles, but broken-down epithelium. In the treatment of this disease the value of the differential diagnosis between the acute and chronic forms is apparent. Local blood-letting and local treatment of any kind is of but little value, except in cases presenting marked cerebral symptoms, or when the kidney is inactive. In these cases local treatment may be beneficial. As to diuretics, it is better to employ the mild ones, such as inf. digitalis, bitart. of potassa, etc., if any. Remedies should be administered which will have the tendency to prevent the rapid degeneration of the blood. The salts of iron, etc. may be used. Bright's prescription was ten grains of tannic acid, in port wine, three times a day, to check the flow of albumen. Some prefer muriated tincture of iron, with a view to its astringent effect in checking the drain of albumen, and to increase the red corpuscles of the blood. Let us use in this case one-half a grain of the perchloride of iron, three times a day. Give, also, two drachms of bitartrate of potassa, three times a day, dissolved in juniper-berry tea, and cod-liver oil, if the stomach will bear it. Let the patient have the best diet the house affords.

January 29, 1862.

BRIGHT'S DISEASE—GENERAL DROPSY.

This was the case of a colored female, a native of Delaware, aged thirty, a domestic, unmarried, of intemperate habits. Till within the past three years she has been strong and healthy, yet subject to headache and occasional palpitation. Last September she had asthma, and some swelling of the extremities. She then suffered also from a severe cold. During the last three years she has been sick more or less of the time; but dates the exacerbation of her disease from November last. Her face is now greatly bloated; her eyelids swollen; her breathing rapid and laborious. The extremities are œdematous, and pit on pressure.

The lungs are full of rattling sounds; the

respiration is rude. The heart-sounds are feeble, and masked by the noisy, coarse respiration; it is enlarged, though there is no valvular disease. The examination of the renal secretion, by heat and acid, gives a copious deposit of albumen; by the microscope, crystals and tube-casts, covered with epithelium. The kidneys are evidently diseased, yet not in a very advanced stage of degeneration. The case is one of general dropsy, with Bright's disease; the dropsy extending to all the important cavities of the body. The prominent symptom here is the dyspnœa, which depends mainly upon œdema of the lung. How shall we relieve it? By dry cups and turpentine stupes to the chest; by blister to scapula, if not relieved without; and by the internal administration of one-half ounce of the bitartrate of potash in infusion of juniper-berries, three times a day. This latter remedy is a diuretic which will not irritate the kidneys. If by these means the dyspnœa and the dropsy are relieved, remedies may then be directed more especially to the disease of the kidneys.

RUPIA.

Mary B., colored, born in Virginia, married, a house-servant, always delicate in health and liable to colds. She was admitted to the house in June last, and sent to the medical ward for treatment. She has had an eruption upon her face for four months, attended by crusty formations upon an ulcerated base. When it first appears, it is in the form of vesicles filled with fluid, followed by the development of pus and the formation of scabs, which assume a conical shape and exhibit circular marks, from the several additions made to them from the surface beneath. Their appearance is similar to oyster-shells. These scabs adhere for a considerable time; but sometimes separate, leaving ulcerated surfaces, from which new scabs are formed. Rupia belongs to the pustular group, and occurs generally in a highly cachectic condition of the system, in persons greatly debilitated by age, or by previous disease. It is sometimes the result of syphilis, or of mercurial salivation. It is tedious and troublesome to cure, and can only be accomplished by treatment directed to the general system, as by the use of tonics, cod-liver oil, etc. If a syphilitic taint be suspected, the iodide of potash should be given in solution. This patient may take a tablespoonful of cod-liver oil three times a day. As a local application, the oxide of zinc, in powder, to the ulcers after the scabs are removed. The diet should be good.

CANCER OF LUNG—TUMOR IN MEDIASTINUM—AUTOPSY.

This case will be recollected as that of a patient seventeen years of age, who was admitted December 1st. His mother died of cancer, and his left leg had been amputated some six months ago for that disease. Some two or three weeks previous to his admission he had cough, with a copious, purulent expectoration. He also had œdema of hands and of his legs, and his whole system seemed rapidly wasting. Examination of the chest revealed dullness on both sides, especially upon the right, and effusion at the lower part of the right side of the chest. Cancer was diagnosed from the history of the case, and from the indications of the presence of an interthoracic tumor, as shown in part by the œdema, also by enlargement of the superficial veins of chest and abdomen.

The post-mortem examination shows a tumor of the mediastinum, about the size of an orange, cancerous in structure. The right lung exhibits nothing but cells of morbid tissue in its upper lobes. In the lower lobes, there is no trace of lung structure left, the whole being a mass of encephaloid. Several cysts may also be observed. The left lung, excepting where attached to tumor, is healthy. You will note the absence in this case of the current-jelly expectoration, which is said to attend cancer of the lung. The sputum was purulent. This sign is not, therefore, diagnostic of the disease.

February 1, 1862.

The lecturer exhibited to the class the post-mortem appearances in the case of Sarah Jones, reported under date of January 29th. The œdematous appearance remained after death; a large effusion was found in the pleura and in the pericardium; right lung highly œdematous; the left had a few scattered tubercles in its structure; left ventricle of heart thickened; clot in right auricle, which from its whiteness and firmness, and adhering to the walls of the auricle, was judged to have been formed during life. The kidney is a typical specimen of one form of Bright's disease. It is smaller than natural, the cortical portions greatly degenerated, slightly granular, with morbid deposits extending to the tubular structure. (Subsequently, at the surgical clinic, a beautiful specimen of mottled kidney, enlarged in its size, showing another form of the same disease, was presented before the class by Dr. Gross.)

The liver is that which is termed by pathologists the "nutmeg liver," and is frequently connected with disease of the heart. It has a fatty appearance and gives evidence of congested portal circulation. The spleen is atrophied, consistency about normal, though not easily torn.

CHRONIC DIARRHŒA.

The two cases mentioned in our report of last week were brought before the class to exhibit the results of treatment. The cases were similarly treated. One was well, the other unimproved. Tenderness of the abdomen still remained, and he has four to six passages daily. He was placed upon the following treatment:—

℞.—Massæ hydrarg., gr. jss;
Opii, gr. j;
Ipecacuanhæ, gr. ss. M.
Take three times a week, alternate nights.

He may also take

℞.—Ferri sulphas, gr. ij;
Quiniæ sulphas, gr. j;
Strychniæ, gr. $\frac{1}{16}$. M.

Three times a day. Small blisters may be applied over the tender portions of the abdomen.

Why this treatment? The intention of the first remedies proposed is to act as an alterative upon the secretions of the intestinal tubes; but the patient should not be salivated. Blisters have been followed by good results in such cases.

The iron is an astringent and tonic, and I prefer this preparation to the more active but irritating one of the perchloride. The strychnia is a valuable remedy in debility of stomach and intestines, to increase the tone of the organic muscular fibers; useful, therefore, in cases attended with relaxation and debility.

February 5, 1862.

GENERAL DROPSY—DEATH—POST MORTEM.

On the 18th of January, (see last number of the Reporter,) the case, now the subject of clinical remarks, was before you. You will remember the appearances then exhibited, and the diagnosis then made, and I need not now recapitulate them. In a short time he became comatose. Twenty-four hours before his death he passed the usual quantity of urine, yet he died, I think, of uræmic poisoning. The post-mortem appearances we now exhibit to you.

The kidneys are enlarged, and exhibit the peculiar mottled structure present in one variety of this disease. The cortical has encroached upon the tubular structure, until there are few tubules left to perform their functions. It is a question among pathologists whether the different pathological appearances of the kidney, seen in different cases of so-called Bright's disease, are not indicative of distinct affections.

The spleen is enlarged, and filled with a peculiar, albuminous-looking substance, a condition which is quite apt to take place in constitutions much broken down by disease.

The lungs are highly œdematous, and adherent to the pleura by old adhesions. They are also highly congested, one being apparently chronic, the other more recent. The liver is healthy. There was an effusion into the pericardium and pleura.

The prognosis in such cases is always unfavorable. Those you have seen here all occurred in constitutions already broken down by disease, and are all likely, I fear, to prove fatal. Indeed, recovery is the exception in chronic Bright's disease, *while death is the rule*. And yet in private practice, and where the patient is surrounded with all the comforts and conveniences which can contribute to his alleviation, recovery occasionally takes place; and, at all events, life may be much prolonged. The difference between hospital and private practice, in this respect, is marked.

CONFIRMED OPIUM-EATING.

Harriet Knox, a native of Maryland, aged thirty-two, was always in delicate health, had all the usual diseases of childhood. Fourteen years ago, at her confinement, instruments were employed to effect delivery. Opium was then prescribed to mitigate her pains and distress, and she has continued to use it since. She has taken the amount of several ounces of laudanum during a single day, and has become a confirmed opium-eater.

You will observe her pale, haggard, anxious expression of countenance; her tongue is dry; the secretions are all dried up. She has some cough, and considerable tenderness of the abdomen, accompanied with chronic diarrhœa of the most intractable kind, having passages upon slight movement of the body. This latter symptom may strike you as anomalous, especially as opium is one of the best astringents in medicine. But this is the invariable rule with opium-eaters. They suffer greatly from diarrhœa. The intestines become worn out, and incapable of natural action. Can this inveterate habit be cured? If your patient has strength of mind, and energy of purpose sufficient, it may be. The fascination of the drug is strong, but recoveries have been made. The famous De Quincy was once a confirmed opium-eater, and he has given the world the narrative of his dreadful experience in its use, and of his struggle to break away from the enchantment. He accomplished it by great firmness of purpose, and by violent bodily exercise, using also, I believe, other stimulants as a substitute. In the case before you the quantity has been reduced to one-half ounce of laudanum at night, but it cannot be entirely discontinued. Sooner or later attacks of great depression will be produced by the drug, a depression and exhaustion which even a large dose will not allay. This is the inevitable result of opium-eating. At first it is an excitant, producing pleasant dreams and entire freedom from all anxiety. The sensations are all exceedingly pleasurable, but the sedative effect follows, producing debility and depression of spirits which requires an increased dose to overcome. So it goes on from day to day. As in cases of acute poisoning by opium, the pupils are contracted. In the case before you recovery is very doubtful, if not entirely hopeless. We are trying to reduce the amount of the drug.

PNEUMOTHORAX.

Mary Ann S., aged twenty, prostitute, has had a cough for the last eight months, gradually becoming worse till four days before Christmas, when it became excessively severe, and was accompanied with great dyspnœa. She had pain in her right side and down the back, which she says came on suddenly, and is exceedingly sharp. She was admitted to the wards four days ago, suffering greatly from dyspnœa. She cannot lie down at all, but sits day and night propped up in her chair or bed. Her appetite is still good,

tongue clean. There is some tenderness of the epigastrium and abdomen generally, but not sufficient to account for the orthopnœa. What is its cause? If we inspect the chest, we find the left side rises naturally, the right scarcely at all. On percussion, we find the right side very clear in resonance, the left side far less so. On auscultation, we find the absence of all sounds, or a feeble, undetermined sound upon the right, while we hear posteriorly a peculiar metallic ring to the cough, and a tinkling sound when the patient is either speaking or coughing. On shaking the patient, we find a slashing sound. The sounds of the heart are indistinct, the impulse is felt outside of the nipple, showing the heart to be forced out of its normal position. Why all these symptoms? The patient has what is technically termed pneumothorax. Without physical exploration, this diagnosis is impossible. By auscultation and percussion we are enabled to determine the true nature of the affection with absolute certainty. The presence of air in the pleural cavity, compressing the lung and viscera, and driving the heart into the left axilla, is thus positively discerned. And this result of our exploration of the chest, the distended chest, its immobility, and the relative absence of natural respiration, all confirm.

The prognosis in pneumothorax is generally unfavorable when arising from an internal cause, as the bursting of emphysematous lung, or softening of tubercles, or breaking down of lung and pleura. It is, however, not always fatal. The air acts as a foreign body, exciting inflammation, the exudation of lymph and pus, thus causing adhesions over the aperture between the lung and pleura, and effecting a cure. A case occurred in my own practice where a patient recovered twice from this affection. But the patient generally dies asphyxiated.

The indications of treatment are to get rid of the air and remove the effusion. Why not make an opening and let it out? The propriety of such an operation has occurred to me, but the risk is too great. I would not advise it. Experience has proved that opium is the sheet-anchor in its treatment. Let us give it to the extent of a grain every four hours; counter-irritation, dry cups, blisters, or wet cups, if the patient can bear it. Shall we treat the pleurisy which is present? It should not be treated too actively, for by this means nature makes an effort to cure the disease, by promoting adhesions.

SURGICAL CLINIC.

Service of Prof. Gross.

January 29, 1862.

AMPUTATION AT HIP-JOINT.

This was the case of a girl under twelve years of age, who, one year ago, had both inferior extremities badly scalded, and in whom the ulceration of the cicatrices had produced an exceedingly loathsome and offensive discharge. All attempts to heal the ulcers had failed. The left thigh is drawn up by the contraction of the muscles; the leg is flexed upon the thigh, and almost the entire surface of the limb is covered with scabs and ulcerations, emitting the most offensive odor, infecting the atmosphere which the child is compelled to breathe. She is pale, anæmic, and greatly emaciated; suffers much from pain, for which it becomes necessary to give anodynes. Her appetite is good. To keep up her strength under this enormous drain upon her exhausted system, she takes the most nourishing food and about six ounces of brandy during the twenty-four hours. The case is a most unpromising one for an operation. The shock may be too great for the enfeebled system, and she may succumb under it; there may be considerable loss of blood; suppuration must follow; erysipelas may supervene; pyæmia may result. All these accidents are to be kept in mind and to be guarded against. Notwithstanding the untoward circumstances of the case, the operation is decided upon as affording the only and a scarcely possible chance of saving the life of the little patient. In the only two operations for amputation of the hip-joint performed in this city, both were recoveries. The statistics of amputation at this joint show that when performed for injuries, the operation is generally fatal, but, on the other hand, successful when for the cure of disease.

The patient was placed under the influence of chloroform; compression was made upon the abdominal aorta by Dr. Agnew, and upon the femoral artery by Dr. Levis. The hemorrhage was thus controlled and the operation performed with the loss of very little blood. The arteries were carefully tied and the stump dressed in the ordinary manner. A portion of the stump healed by the first intention, moderate suppuration took place in the remainder, and the healing process went on without any untoward symptom. The patient's appetite was good; tonics and stimulants were freely administered *pro re nata*, and at this present writing, (February 15th,) the case is progressing finely and rapidly to a successful termination.

Medical Societies.

ANNUAL MEETING OF THE NEW YORK STATE MEDICAL SOCIETY.

The Fifty-fifth Annual Session of the New York State Medical Society commenced at the City Hall in Albany, on Tuesday the 4th inst., and continued in session for three days.

Dr. E. H. Parker, of Poughkeepsie, President of the Society, called the Society to order, and in his opening address alluded to the death of his predecessor in office, Dr. Daniel T. Jones, in a very appropriate manner, as a man whom he had "learned to respect and admire" for the "manly truthfulness of his whole character, which served as a worthy setting in which the

talents entrusted to him are made to show their charming luster." In alluding to the events of the year, he said:—

"They have produced a marked effect upon our profession. Military surgery has suddenly assumed an unusual prominence, and there are, I suppose, few of us who have not reviewed the topics which especially interest the practitioners who have the professional charge of soldiers. The modifications required in the treatment of gunshot wounds in consequence of the effects of the new projectiles differing from the old, as well as those which come from the use of anæsthetics, have been among the subjects which have been earnestly studied. But it is to be borne in mind that the medical officer of the army, so far as he acts as a surgeon proper, is almost a specialist, while a large share of his duties are purely medical. No regiment is constantly going into action, and the shafts of disease are far more fatal to soldiers than the bullets of the enemy. As a defense against the latter, the engineer is required to throw up his earth-works; and it is equally the duty of the medical officer to see to it that the men under his charge are as far as possible protected from the former. Prophylaxis—whether it be by using quinine to prevent malarial disease, or by compelling attention to the sinks and other sources of effluvia to avoid camp dysentery; or by seeing to it that cleanliness of the person is enforced as an especial defense against the invasion of typhoid diseases; or by a careful supervision of the means and modes of cooking—prophylaxis, I say, is a far more important study than that of the latest way of doing an amputation. The character and mode of the operation required from a gunshot wound is usually settled by the ball that inflicts it, and that with a profound disregard of the theories and dogmas of the schools, whether they be English or French, German or Russian, compelling one to take his flap, and to separate the bones when he can, not when he would.

"I am aware that I speak to masters of the profession. But do not the masters sometimes overlook these apparently little things, which are in reality the truly great things of life? To whom does the world look up as the more eminent army surgeon—to the man who has done the most operations, or the man who has kept the troops under his charge in the highest degree of health? Which should each of us prefer to be? I do not doubt that the answer to both questions would be in favor of the operator; and yet any one of us knows it ought not to be so.

"How much more danger is there of this false standard of distinction prevailing among those of our profession who are actually in the field! We and they both need to have it impressed upon our minds that amputation is a reproach to our art—a continued acknowledgment that our skill is not equal to the restoration of the parts. And it injures no one to recall the fact that we have done better, if we have prevented an army from being decimated by sickness than if we have made a hundred amputations."

With patriotic devotion to the country, in this its hour of peril, he said:—

"On one point I take it for granted that we are of the same mind, viz., that the services of each and all of us are at the command of our country whenever and wherever they are made."

He congratulates the Society that this State was the first to take especial pains to prevent the introduction of incompetent surgeons into the army, by requiring a thorough examination as a test of their qualifications. Upon the duty of a military surgeon to the wounded, when the battle is lost, he said:—

"It is more in accordance with the spirit of our profession, which is never deficient in bravery or self-devotion to the good of others, that if the wounded are in any numbers, the surgeon should remain with them. The surgeons of the victors usually have as much as they can do among their own troops, and if any are neglected it naturally is the prisoners. With the necessary confinement, trifling neglects become serious, and the result of an operation may be entirely different when advised and performed by a known and tried friend, or an avowed enemy.

"The very touch of a friendly hand is to a sick prisoner often more than medicine. To all of these, it seems to me, the soldier has a claim, and if he knows he may expect such devotion from his surgeon, he will fight with less hesitation. These principles hold, of course, only in large engagements, when there are many wounded on both sides."

In this connection, he commended in befitting terms the heroism of those surgeons who remained with the wounded on the battle-field, preferring to suffer the dangers, as well as inconveniences of prison life, rather than desert their posts. In conclusion, he said:—

"I had hoped to lay before you some plan, by the adoption of which the sufferings of war, so far as they concern the wounded men, might be lessened, by allowing the surgeons of the contending armies to visit the battle-fields unmolested, on the purpose of caring for the wounded, while, at the same time, they could superintend the decent burial of the dead. But I have found so many obstacles at the commencement of the effort that it has seemed useless to go further. Military men are jealous of allowing any foe to go within their lines on any purpose, and it cannot be denied that a spy might pretend to be a surgeon, and obtain important information, while professing to be occupied in these sacred duties.

"On the part of the United States government, these difficulties could, I believe, have been overcome; but there has been such a strange disregard of the ordinary dictates of humanity on the part of those who are in arms against it, that I have not thought it best to persevere in the attempt. If the Society can devise any way of accomplishing this end, it would be well worthy of it to do so."

At the conclusion of the President's address, resolutions were introduced by Dr. Potter, disavowing responsibility for any theories or senti-

ments advanced by any gentlemen, in the papers read by them and published in the Transactions of the Society. This position of the Society was deemed to be so well understood that the resolutions were laid upon the table. A committee of three, consisting of Drs. Bissel, Howard Townsend, and Kendall, was appointed to consider and report upon the suggestions in the President's address.

Dr. S. D. Willard submitted a memorial of Dr. Merrit H. Cash, who died at his residence, Rutger's Place, in Ridgebury, on the 26th of April, 1861, in the 59th year of his age. Dr. C. had been a member of the Society twenty years, and bequeathed $500 to the Society.

Dr. Finnell presented several pathological specimens, and also read a paper on a case of peritonitis. Referred.

The secretary read a communication from the Oneida County Medical Society, covering a preamble and resolutions, adopted by that Society, in opposition to the passage of a law by Congress permitting the introduction of homœopathic physicians and surgeons into the army. Laid on the table for the present.

The secretary presented a communication from the Monroe County Society on the subject of Criminal Abortion, covering the following resolution:—

Resolved, That in view of the enormous increase of criminal abortion and the inadequacy of the present law to properly punish the offenders, this Society request the New York State Medical Society to press upon the notice of our Legislature the memorial presented to them by the American Medical Association on this subject.

The resolution was adopted.

Dr. J. V. P. Quackenbush, treasurer, showed the receipts during the year to have been $294 41, and the disbursements $184 62, leaving a balance in the hands of the treasurer of $107 79. Report accepted, and referred to Drs. Corliss, Govan and Coates, to examine vouchers.

Dr. Bissell read a very interesting paper on Paralysis—a sequela of Diphtheria—Reflex Paralysis.

The subject was discussed by several gentlemen.

On Wednesday Dr. White called up the paper from the Oneida County Medical Society, relating to the employment of Homœopathic Surgeons in the Army, when Dr. Garrish presented the resolutions adopted by the New York Academy of Medicine. The matter was referred to a committee, who subsequently reported that they had examined the subject carefully, and advised that all unnecessary action that might be construed into persecution be avoided; that the committee feel satisfied that the government will take no step that can need the action of the Society. The report was accepted and adopted.

Dr. Willard, of Albany, presented a list, compiled from authentic sources, of all the surgeons and assistant-surgeons of the Volunteer force of New York State, together with their ages, where graduated, and year, what service seen, hospital and private practice, when appointed, and what changes by promotion or resignation, etc. This paper will prove valuable to all who are interested in the surgical force of the State, and will be important for historic data to the profession in future years. It is desirable that some person should act upon this suggestion of Dr. Willard, and prepare similar tables for each of the loyal States.

Dr. Edmund Arnold, of Yonkers, N. Y., read a very valuable and highly interesting paper, entitled "Medical Provisions for Railroads, as a Humanitarian Measure, as well as a source of Economy to the Companies."

This was a well-digested paper, eminently practical in its recommendations, and the results, if obtained, would be a great saving to human suffering and life.

Dr. Mason, of Brooklyn, presented a preamble, setting forth that the Health Laws of this State have not kept pace with the rapid modern progress of Sanitary Science, and offering a resolution, as follows:—

Resolved, That the bill, now before the Legislature, known as the "Metropolitan Health Bill," meets with the cordial approval of the State Medical Society, as a measure which, though partial in its application to one section of the State, is a step in the right direction, and should be enacted into a law without delay.

Dr. Griscom, of New York, explained the nature of the proposed law, and the great necessity for its passage.

The resolution was adopted unanimously.

Dr. Brinsmade offered the following resolution:—

Resolved, That a committee of five be appointed to draft a Sanitary Code for the State of New York, and submit the same to this Society, for its consideration, at its next annual meeting. Adopted.

Dr. Hutchinson, of Kings, read a paper, entitled "Dislocation of the Ischiatic Notch, with Autopsy."

Dr. Downs, of New York, read a paper, entitled "Synopsis of a case of Peritonitis occurring in a child, and the administration of large doses of morphine in its treatment."

Dr. Marsh presented a pathological specimen of "Cirrhosis of the Liver."

Dr. Blatchford announced a communication from the New Jersey State Medical Society relative to the appointment of a delegate to the New York State Society; and moved the appointment of a delegation of six to attend the next annual session of the New Jersey Society. Agreed to.

A communication was received and read from Dr. Elisha Harris, from the committee on the Medical Topography of the State, informing the Society that it will not be possible to complete the work for the present session. Accepted.

Dr. Swinburne, of Albany, then read his paper, "Post-mortem Notes of a Case of Supposed

Murder," (the celebrated Budge case.) The paper was listened to with great attention by a very large audience of medical gentlemen, and the views and theories advanced by Dr. S. were fully sustained by several distinguished surgeons, whose letters were read.

Dr. Shrady, of New York, presented resolutions, and subsequently the report of a committee urging the favorable action of the Legislature upon the bill now pending before them, relative to the provision of a medical corps and surgical appliances, simple but sufficient for all cases of emergency. Surgeons who now respond to such cases are never sure of compensation for their expenses, time, and services.

On Thursday, Dr. Willard presented a communication from Dr. E. R. Peaslee, entitled "Mechanical Appliances on the Treatment of Uterine Affections."

The Committee on Nominations reported as follows, and the gentlemen named were elected to the respective offices:—

For President—Thomas Hun, of Albany.
For Vice-President—D. P. Bissell, of Utica.
For Secretary—S. D. Willard, of Albany.
For Treasurer—J. V. P. Quackenbush, of Albany.
Committee on Publication—Drs. Thomas Hun, Sylvester D. Willard, and Howard Townsend.
For Censors—Southern District—Wm. Govan, Joel Foster, and Elisha Harris.
Eastern District—Barent P. Staats, Thos. W. Blatchford, Peter McNaughton.
Middle District—Jenks S. Sprague, Chas. B. Coventry, and A. F. Doolittle.
Western Division—Alex. Thompson, H. W. Dean, and Edward Hall.
Committee on Correspondence—John H. Griscom, W. P. Townsend, Wm. P. Seymour, Hiram Corliss, Luther Guiteau, John G. Orton, Jonathan Kneeland, and J. W. White.
For Permanent Members—1st District, E. R. Peaslee, T. C. Finnell; 2d District, Abm. Crispell, John D. Watkins; 3d District, Sylvester M. Van Alstyne, Samuel H. Freeman; 4th District, Theo. L. Mason, Henry A. Carrington; 5th District, L. V. Cobb, A. G. Purdy; 6th District, P. Brooks, E. S. Lyman; 7th District, Harvey B. Wilber, Joseph Beattie; 8th District, John Boardman, Chas. E. Van Auden.
Nominated for Permanent Membership—1st District, Alfred Underhill, Jared Lindsley, John W. Green, Oliver White, John P. Garrish, J. H. H. Burge; 2d District, —— Durrie, I. O. Van Hovenburgh, Isaac E. Taylor; 3d District, John Swinburne, C. H. Porter, W. H. Bailey, A. D. Hull; 4th District. James Ferguson, Alex. Ayres; 5th District, Hiram Adams, Wm. Taylor; 6th District, J. K. Chamberlain, W. H. H. Parkhurst; 7th District, H. W. Dean, —— Cook; 8th District, J. M. Miner, D. Bly.
Elected Honorary Members—T. G. Geoghegan, of Dublin, Ireland; Ashbel Woodward, of Conn.; John Jeffries, of Boston; Wm. Carpenter, of London; Henry Bronson, of New Haven.
Nominated for Honorary Membership—R. S. Saterlee, of the U. S. A.; Joseph Carson, of Philadelphia; S. W. Butler, of Philadelphia; Wilson Jewell, of Philadelphia; N. S. Davis, of Chicago; R. R. Cuyler, U. S. A.; Ralph Isham, of Chicago.
Delegates to the American Medical Association—T. L. Mason, C. V. Barnett, A. Crispell, H. W Dean, T. F. Jenkins, Thomas Hun, S. O. Vanderpoel, Charles E. Van Auden, Charles Budd, D. P. Bissell, E. H. Parker, E. R. Squibb, Chas. S. Wood, I. O. Van Hovenburgh, Wm. Govan, T. C. Brinsmade, H. Corliss, Henry S. Downs, W. P. Seymour, E. R. Peaslee, —— Colvin, Joseph Beattie, Geo. A. Dayton, Sanford R. Hunt, Joseph C. Hutchinson, Henry C. Gray, Thos. W. Blatchford.
Delegates to National Quarantine and Sanitary Convention—E. Hall, T. L. Mason, D. Bly, J. H. Griscom, Elisha Harris, Mason F. Cogswell, J. V. P. Quackenbush J. G. Adams, Hiram Corliss, Howard Townsend, J. M. Miner, Wm. Govan.
Delegates to the Connecticut Medical Society—N. C. Huested, J. G. Adams, Jos. C. Hutchinson, S. D. Willard, H. D. Bulkley, S. T. Hubbard.
Delegates to Medical Society of New Jersey—Thos. W. Blatchford, —— Dudley, J. A. Brady, D. Bly, W. P. Townsend, J. M. Green.

Dr. Willard presented a paper entitled "The Protective or Prophylactic, Preventive, and some points in the curative uses of Quinine in miasmatic localities and miasmatic districts."

Dr. C. A. Lee presented a paper entitled "On the means of arresting hemorrhage, from wounds received in battle, with a history of the measures heretofore resorted to for that purpose."

Dr. C. H. Porter presented a paper entitled "Arsenical Poisoning."

Dr. J. H. H. Burge presented a new surgical instrument "for the removal of foreign bodies from the Œsophagus and Larynx."

The committee to whom was referred the introductory address of the President, presented a series of resolutions. 1st. Applauding the boldness and heroism of our surgeons who stood by the wounded soldiers at Bull Run. 2d. That those surgeons, now in bondage, who have declined their parole, on the condition that they would not again serve during the war, receive the thanks and commendation of this Society. 3d. That a copy of these resolutions be published in the Washington papers. 4th. Expressing thanks to Dr. S. Oakley Vanderpoel, Surgeon-General, for his indefatigable efforts toward supplying our army with the best of physicians; and also to Drs. March, Hun, and Cogswell for the thoroughness of their system of examinations. 5th. Resolutions of condolence and sympathy on the death of the late President, Dr. Daniel T. Jones.

The resolutions were unanimously adopted.

The address of Dr. Parker, on the dignity of the medical profession, was listened to with marked attention and satisfaction. A committee was appointed to revise the code of medical ethics of the Society, and those of the American Medical Association. This is an important and delicate measure. The committee are Dr. C. A. Lee, Dr. Howard Townsend, of Albany, and Dr. James M. Miner, of Brooklyn. To these men the matter may safely be entrusted.

The Society was hospitably and elegantly entertained on Wednesday evening by the Surgeon-General, Dr. Vanderpoel, and by Dr. Swinburne. The meeting was largely attended, and all the papers were of interest.

MEDICAL SOCIETY OF NEW JERSEY.

The Ninety sixth Anniversary of the Medical Society of New Jersey was held at New Brunswick on the 28th and 29th days of January. The President, Dr. Blane, in the chair. The attendance of both members and fellows was unusually large, nearly all the district societies in the State being represented. The President's address, upon the subject of "the Medical Society of New Jersey, its objects, and the duties of its members," was well received and a copy requested for publication.

The standing committee, through their chairman, Dr. Wickes, made a very interesting report, which was ordered to be published. It contained quite an extended notice of the epidemics which had prevailed in the State during the past year,

a review of malarious diseases as they have occurred in the State for several years past, as well as a report of many rare and anomalous cases of disease. Diphtheria and typhoid fever have been more or less prevalent in some sections of the State. In the report reference is made to the appointment of Mr. Craven, of Newark, as brigade-surgeon in the United States army, and of the action of the Essex District Society upon the same, whereupon the following resolution was passed:—

"That the action of the Essex District Society, in their protest against the appointment of Mr. Craven, referred to in the report of the standing committee, be approved by this society."

The committee on malaria having made no report, were reappointed.

The report on nervous diseases, read by Dr. Hunt, was accepted and referred to the committee on publication.

Dr. Pierson offered the following preamble and resolution, which were adopted:—

Whereas, painful intelligence has been received by the society that our venerable and much-respected brother and fellow, Dr. Lewis Condit, of Morris, for many years a most efficient and valuable member, has been laid upon a bed of suffering and pain in consequence of a fracture of the neck of the femur; therefore,

Resolved: That the society extend to him its warmest sympathy and sincere condolence, with the hope that his life may be prolonged for many years, and his health restored, so that we may again be cheered by his presence, and the interest of the profession receive his wonted aid, and that a copy of this resolution be forwarded to the doctor by the Corresponding Secretary.

The following committees on scientific subjects were appointed:—

"The best principles of treating Traumatic Gangrene of the Lower Extremities," Drs. A. Coles, Wm. Pierson, Jr., E. B. Freeman.

"Is there any natural adaptation of particular remedies to certain Tissues or Diseased Conditions?" Drs. Baldwin, L. A. Smith, and Stone.

Dr. Morrogh was appointed essayist.

The officers elected for the ensuing year, were as follows:—

President.—J. Woolverton, of Trenton.

Vice-Presidents.—T. R. Varrick, E. M. Hunt, A. Coles

Corresponding Secretary.—T. J. Corson, Trenton.

Recording Secretary.—Wm. Pierson, Orange.

Treasurer.—J. S. English.

Standing Committee.—S. Wickes, of Orange; Thomas Ryerson, of Newton; R. M. Cooper, of Camden.

Delegates to American Medical Association.—Drs. W. Elmer, S. H. Pennington, A. B. Dayton, G. Grant, J. Blane, Wm. Pierson, Jr., L. A. Smith, S. M. Disbrow, J. A. Freeman, H. R. Baldwin, B. H. Stratton, and J. B. Coleman.

Delegates to State Societies.—Connecticut, Dr. J. Phillips. *Massachusetts*, Dr. L. S. Condit. *New York*, Dr. L. A. Smith. *Pennsylvania*, Dr. R. M. Cooper.

Delegates to Sanitary Convention.—Drs. E. M. Hunt, S. Wickes, Wm. Pierson, Jr., Stone, J. S. English.

The next annual meeting of the society is to be held at Jersey City.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

QUININE AS A PROPHYLACTIC IN MALARIOUS DISEASES.

In the Reporter for November 9th we gave a summary of two articles upon the above subject, in one of which objections to such use of quinine were urged, and in the other facts were adduced in support of the utter harmlessness and prophylactic efficiency of such use, however long continued, providing the subject remained the while in malarious regions. We gave our own views, and referred to two other articles in support of the last-mentioned opinion.

In the *American Medical Times* of the same date, (November 9th,) Dr. J. King Merritt has an article upon the same subject, which details too important experience to be passed over in our *Summary*. We would be glad to give the article entire, but must content ourselves to try the difficult task of condensation.

In 1850, Dr. Merritt went with a mining and exploring party to the Province of Veraguas, on the Isthmus of Darien. To that party he acted as surgeon. Very soon after their arrival and commencement of labors, intermittent fevers became quite general with the party, and of so severe and congestive a character as to require about sixty grains of quinine in the intervals of the paroxysms to arrest them. Notwithstanding such large doses of quinine were given, and continued for a week, the intensity of the poison was such, and the effects of the quinine so transitory, that in two or three weeks the disease would return in all its severity. These attacks recurring so frequently, and each incapacitating the patient from

duty for several days, it became very important to ward off. To this end, the daily administration of quinine was commenced. In a few instances, a second dose of quinine, and that at evening, was found necessary. The result was in every respect satisfactory. Notwithstanding quinine in five, and in some instances ten grains daily was administered to each member of the party, after three months trial, "in calculating the average consumption of quinine per day for each individual, it was found to be *about ten per cent.* less than in the previous two months." The doctor thinks an attack of fever is always preceded by premonitory symptoms that can be detected by an intelligent observer; if the daily dose is too small to prevent a fever, an increase made at the first onset of the premonitory symptoms may still prevent an attack.

Dr. Merritt says the absence of fevers, and the better condition of the health of the party, was not owing to the acclimation; for, if by carelessness or other causes the daily dose was interrupted, an attack was sure to return, and with usual severity.

In contrast to these good results, it may be observed that another physician joined the party from a spirit of adventure. He was a specimen of a robust man in good health, of good habits, action, and adopting all usual sanitary measures; but, what is unusual with an intelligent physician, was opposed to the use of quinine. He was advised to take the quinine as a prophylactic, but refused to do so. In about six weeks, "he was prostrated by a congestive chill, from which he never recovered, although heroic measures were then adopted to bring about reaction."

After a two years' sojourn in the locality above mentioned, the mining operations were disposed of to an English company, composed of twenty-three persons. The surgeon of the company was warned, but neglected to use the prophylactic. The result was, that in less than a month there were only five members of the staff, excepting the surgeon, able to perform duty, and three of the five mentioned had taken some quinine at irregular intervals; the benefit of which had been taught to them by previous experience in Brazil and the East Indies.

"Of the remaining seventeen officers and miners who had been attacked by the malarial fever, three had died within a week after the paroxysmal development of the disease, and the other fourteen were invalided and sent home, after a month's treatment with full doses of quinine, in a deplorable state of shattered health."

After another year's stay in the above-mentioned locality, Dr. Merritt became connected with a party of miners in New Grenada, where he still continued his prophylactic treatment for six years longer, and he says: "It was my good fortune not to have a fatal case, or protracted convalescence from malarious disease, either with northerner or native." He thus concludes:—

"In conclusion, my deductions from the experience of nine years' use of quinine in tropical, malarious districts are: 1st. That no serious harm to the system ensues from the long-continued and judicious use of quinine. 2d. That quinine, given as a *prophylactic, will certainly prevent the developments of miasmatic disease*, and neutralize malaria already in the system. 3d. That *the amount* of quinine required to maintain a status of health under malarious influences is *much less*, when used as a *prophylactic*, than as a *curative* after development of miasmatic disease. 4th. That the amount of quinine required as a prophylactic is more uniform than as a remedy after attack of malarial disease. 5th. That quinine will not always restore to health a person *after repeated attacks* of malarial cachexia, especially if not removed from the miasmatic influences. 6th. That cold, clear infusion of coffee is the preferable diluent for morning dose, and whisky for the evening dose of quinine as a prophylactic. 7th. That quinine dissolved in spiritus nitrosi dulcis, produces very happy effects when administered during paroxysms of malarial fever."

We regard this as an all-important subject. At any time, in malarious regions, and during the malarious seasons, to those subject to the influence of the poison and liable to suffer from its peculiar morbid impressions, the subject comes with tidings of joy and words of comfort. But at the present time, should war continue to desolate our land, when we have more than half a million of unacclimated soldiers, liable to be called into the intensely malarious regions of the South, the subject has a politico-economical bearing, besides centering upon our emotional feelings of humanity. Our army surgeons may have an opportunity to settle the question of the prophylactic powers of quinine beyond dispute. To them we commend the subject, and we have no doubt they will improve their opportunities.

OPIUM IN DISEASES OF CHILDREN.

In another part of our *Summary*, p. 486, reference is made to a clinical lecture upon belladonna, by Prof. A. Jacobi, in the *American Medical*

Monthly. By some carelessness, we overlooked a clinical lecture by the professor, delivered in the New York Medical College, and published in the previous number of the above-mentioned journal. As the professor's experience is large, and his views eminently sound and practical, we shall call our readers' attention to the lecture.

The diseases of infantile life require especial study, as the child presents many idiosyncrasies that are unknown in adult life. Prof. Jacobi truthfully says: "For the purpose of attending the diseases of children, it is not sufficient to diminish and sweeten the doses administered to adults."

Though children are more readily affected by opium than adults, Prof. Jacobi does not regard this fact as a valid objection to its judicious use. He regards it as a valuable remedy in a variety of diseases and conditions of disease. We instance *cerebral irritation*, catarrh of the stomach and intestines, laryngeal catarrh, etc. We should add quite largely to this list, though these conditions may occur in a great variety of diseases.

Prof. Jacobi makes a practical remark here that may have reference to all other remedies as well as opium. The same idea we have expressed on several previous occasions, but it is deserving of frequent repetition, until it becomes the ever-present idea in the administration of remedies. He says:—

"Lastly, I wish to direct the attention to Schoepf Merei's assertion, that whenever opium has been really indicated, he has not been unfortunate in its administration. I go further, contending, as I have done in a lecture delivered a long time ago in the College of Physicians and Surgeons, (*New York Journal of Medicine*, September, 1859,) that whenever a medicine is really indicated, it is tolerated in large doses. Thus it is, that in peritonitis, for instance, in children, we may at once resort to large doses of opium, availing ourselves of the discovery of Prof. Clark, as well in children as in adults, and following the example of Prof. G. T. Elliot, published some years ago; thus it is that, in a number of cases, opium will sometimes be tolerated in really immense doses."

We would say, be sure of the correctness of the indication, and then go forward with boldness. We have no fear of consequences where a physician is clear and correct in his indications, though he prescribes with boldness; but large dosing with active remedies, where the indications are confused and uncertain, is but a "kill or cure" rashness.

To the same point he observes:—

"Without a correct diagnosis of the condition of the brain, opiates are not advisable; but I desire this principle not to be forgotten, that without a correct diagnosis, no powerful remedy ought to be administered; and less than any others, antiphlogistics and antiplastics, so readily resorted to in every and any cerebral complaint."

We cannot give the professor's many indications for the use of opium in infantile diseases. As a sample, however, we will quote one in reference to the difficult subject of *cerebral irritation*:—

"The general impressibility of the nervous system in infantile age, both central and peripheric, is an undoubted fact; we observe a number of nervous symptoms in which we are unable, as yet, to discover any anatomical lesion, either their central or peripheric; we know, even, that the majority of attacks of convulsions in infantile age are reflected, and we are, therefore, justified in assuming that a central organ receiving such impressions and irradiating them again to its periphery, must occasionally be in a thorough state of irritation, without intense anatomical alteration. In such cases, the diagnostical differences of which are stated by the books, I mostly rely on the use of small doses of sulphate or acetate of morphia, or codeinum.

℞.—Solut. morph. (Magendie,) gtt. v;
Aquæ, f℥j. M.

D. S. Three times a day, half a teaspoonful, to a child of half a year or a year of age."

In regard to the appropriate doses of opium for a child, he observes:—

"The late Schoepf Merei, the director of the Children's Hospital at Pesth, Hungary, and afterward Professor of Infantile Pathology in the Manchester (England) School of Medicine, and well known as a medical writer, prescribes opium very rarely to the newly born; from the second to the third week, his medium dose is the hundred and twentieth of a grain; from three to sixth weeks, one-hundredth; from sixth to eight weeks, one-seventieth; from two to four months, one-fortieth of a grain. The action of a proper dose of opium is, according to Schoepf Merei, manifested half an hour after its exhibition, and lasts from three to six hours."

These, he says, are exactly the doses he uses, but he differs in regard to the duration of the action—he has found it shorter, and, consequently, repeats the dose every three hours so long as the indication is present.

We hope Prof. Jacobi will continue his lectures upon *Infantile Pathology and Therapeutics*, and publish in book form. We have several works upon diseases of children, but we have room for another, such as Prof. Jacobi could write.

TREATMENT OF CONGESTIVE AND INFLAMMATORY DISEASES OF THE BRAIN BY CAUSTIC ISSUES ON THE SCALP.

Before the New York Medical and Surgical Society, as per report in the *American Medical Times* for November 23d, Dr. Post made a few remarks upon the above subject. He applies these caustic issues to the scalp, about an inch from the median line on either side. The part is first covered with porous paper, and afterward moistened with nitric acid. Dr. Post's remarks were made with reference to diseases of children.

"He stated that he had occasion, several years ago, to resort to this practice twice in the same case. In his opinion issues applied in that manner had been much more effective than blisters. He had followed these children up for several years, but had not noticed any deficiency in intellect. He had resorted to the same practice in one or two cases of coma and convulsions, occurring in the adult after injuries of the head, and the symptoms have been very much relieved. The patients, however, subsequently, following out the general rule in those cases, died."

In a case reported of a child, three years of age, who had been in a somnolent condition for three or four days, and whose symptoms were supposed to be the result of tubercular meningitis, improvement was quite marked after the use of the caustic issues. Iodide of potash was administered to the little patient, conjointly with the application of the issues, in two-grain doses, repeated every four hours. Considering the power this remedy has over the symptoms as present in the case reported, we think it is hardly just to give all the credit to the issues.

MERCURIAL TREATMENT OF MORBUS COXARIUS.

In the *Chicago Medical Examiner* for November, Dr. W. Godfrey Dyas has an article upon the above subject. He regards the mercurial as the most efficient of known treatment in the early stage. He says:—

"For many years I have had abundant opportunities of appreciating the importance of this plan of treatment, which, I feel confident, is able to cut short the disease in its first stage, to lessen pain and suffering, and to bring about a cure without deformity." * * * * "In employing the mercurial treatment, we must remember there are, at least, two ways of doing anything, and we should, therefore, ascertain accurately, beforehand, in what respect the right way differs from the wrong. In view of this, we should commence the treatment at an early period of the disease, and not defer it until the latter shall have advanced to complete disorganization." * * * * "The mercurial must be introduced rapidly into the system, not slowly, and in alterative doses. The former mode tends to benefit, the latter never fails to impair, the scrofulous constitution."

This is not a new method of treating this disease, neither does Dr. Dyas so regard it. It is not in accordance with the usually adopted treatment, and yet, we doubt not, the treatment would be judicious, if we could always select our time and conditions. We very seldom see this disease until, it seems to us, the stage has passed for the rapid mercurial course. Perhaps we are in error. In the very first and active stage of the inflammation, the course advised is quite appropriate, to be followed by a tonic—the two conjointly are not incompatible, if the circumstances of the case demand it.

Dr. Dyas' views, in regard to surgical operations and mechanical appliances in this disease, we have not space for. In the later stages, we think he greatly underrates their utility.

CHRONIC OZÆNA TREATED WITH IODIZED CHLOROFORM.

In the Chicago *Medical Examiner* for November, Prof. Wm. H. Byford and Dr. F. W. Reilly report cases of ozæna treated by inhaling through the nose a combination of iodine and chloroform. The prescription used varies from ten to twenty grains of iodine to the ounce of chloroform.

"This prescription is used by applying the open phial containing it to one nostril, while the other is closed with the finger so as to prevent the air from entering. As much of the vapor is inhaled in this way as can be taken with the inspired air, until the patient is conscious of a slight effect from the chloroform. He should now desist for ten minutes, and then inhale through the opposite nostril in the same way and to the same extent. This should be repeated two or three times a day, persistently, for a length of time. The secretion of the Schneiderian membrane is modified almost immediately upon the beginning of this inhalation. * * *

"Should there be any objection to the vapor passing the glottis, it can be snuffed with short instead of deep inspirations, but the inflammation often affects contemporaneously, if not continuously, the mucous membrane of the fauces, pharynx, larynx, and bronchi, and is just as beneficially influenced by the remedy in those parts as in the nose."

For several years Prof. N. S. Davis has been in the habit of using this preparation by inhalation—

"In tuberculosis accompanied by a harassing cough, in tubercular laryngitis, and in inflamma-

tions involving the fauces and Schneiderian membrane, and with a good degree of success."

Dr. Reilly says:—

"Some five or six years since, Dr. Davis commenced the use of iodine in this manner in tuberculosis," etc.

And further:—

"I do not know that its use has been made known to the profession, nor, so far as I can learn, is it prescribed by any physician of this city, except Drs. Davis and Byford."

The iodine vapor was not first used by Prof. N. S. Davis in tuberculosis, as is inferred by Dr. Reilly.

In the *Iowa Medical Journal* for June, 1855, (nearly seven years ago,) Prof. D. L. M'Gugin, of Keokuk, has an interesting article upon the inhalation of iodine vapor in phthisis, chronic bronchitis, etc.

Two very interesting cases are reported, illustrating the good results of this treatment. The first was an evident case of phthisis, complicated with that condition of the bronchial mucous membrane peculiar to clergymen.

"In a few days after he began its use, his cough was less harassing, the sputa diminished in amount, his breathing as yet not much slower was nevertheless easier, his voice improved to a tone of more compass and a better resonance; his appetite and digestion also amended.

"A persistence in its use resulted in still further relief to the cough; the breathing now was slower, the muco-purulent matter diminished in amount, and the expectoration was now attended with but little effort, the soreness of the throat was relieved, the occasional rigors, fever, and colliquative sweats, had disappeared in a month, and his strength was so much improved as to enable him to leave the house and take exercise in the open air."

Dr. Reilly is mistaken, also, when he says that iodine inhalation has only been used, in Chicago, by Drs. Davis and Byford.

In the Nashville *Journal of Medicine and Surgery* for September, 1859, Dr. J. N. Graham, of Chicago, has an article upon *Medical Inhalation in Consumption.* He thinks well of inhalation, and *reports several cases illustrative of benefit.* He recommends Minthon's Inhaler. We give a formula or two, which he uses:—

"℞.—Acidi hydrocyanici, f℥ij;
Vin. ipecac.
Tinct. opii camph., āā f℥ss;
Tr. conii, f℥ij;
Aquæ rosæ, f℥xij. M.
Inhale ½ oz. three times a day."

"℞.—Cyan. potassæ, gr. viij;
Ext. stramonii, ℥ijss;
Tr. ipecac. f℥j;
Tr. lobeliæ,
Tr. stramoniæ, āā f℥vj;
Lac. assafœtidæ, f℥iv. M.
Inhale a teaspoonful three times a day."

It is our opinion that regular physicians have too much neglected inhalations. The suffering consumptives, at least, have confidence in them, and they have long been the stock in trade upon which quacks have flourished. If physicians would give inhalations that attention which their importance demands, we have no doubt that many consumptives would be kept out of the hands of ignorant and unprincipled quacks.

The vapor of iodine by inhalation, in bronchial and tubercular diseases, had been recommended and used even before the publication of the paper by Prof. M'Gugin. In combination, both with ether and chloroform, the iodine has since been administered by inhalation.

Though consumption is a constitutional difficulty, and not to be cured by local means, yet if some distressing symptoms can be thus relieved, the means are not to be despised because not able to accomplish all that could be desired. In ozœna, and in many cases of chronic bronchitis, we have no doubt but good may result from such inhalations. The masses have much faith in the inhalation treatment of consumption. Consumption curers and traveling doctors have catered to this faith and confidence, and reaped a golden harvest. From the hands of the knavish, advertising pretenders, and ignorant, traveling mountebanks, this interesting class of cases should be wrested and handed over to the honest and intelligent physician, who will bring to such sufferers all the aid that science and skill has at present at command. The gold that has filled the pockets and built palaces for these ignorant, black-hearted, inhaling mountebanks, should reward science, high professional skill, industry and honesty. It is quite probable that physicians could use inhalations much more than they do, and with a mutual benefit to their patients and to themselves. We would not be understood as overrating this means of relief or cure. Believing, as we do, that tuberculosis is a constitutional disease, we can but express our conviction that cures of phthisis by inhalation must be exceedingly rare. In all constitutional diseases with a local determination or manifestation, we can imagine how local means will be of service; but

how, by their agency alone, radical and permanent cures can be effected, we cannot so easily conjecture. Be the local medication what it may, whether inhalation or bronchial injection, in tubercular diseases they should, in our humble opinion, be auxiliary to constitutional remedies. The tubercular diathesis, if eradicated at all, can only be so through constitutional means; while bronchial inflammation and tubercular excavations may be advantageously treated by local applications. If physicians would explain to their consumptive patients the true nature of tubercular diseases, and the respective merits of local and general remedies, and judiciously combine them to meet the indications of each case, the members of our profession would receive, at the hands of consumptive invalids, that confidence of which they are deserving; while inhaling quacks would dwindle to their just proportions, and receive less of encouragement and support.

Not less than five years ago, we used iodine, dissolved in chloroform, by inhalation, in bronchial and tubercular diseases, with marked benefit to some of the most distressing symptoms. At that time we supposed we were original in our combination, but we have since learned that we had been anticipated in such use of this compound vapor.

Nearly six years ago, we found most marked temporary relief from most distressing symptoms, in the very last stage of pulmonary tuberculosis, by the inhalation of chloroform. The relief was so decided and satisfactory, that the dying patient would beg most earnestly and piteously for its frequent repetition. This experience, after reading the article by Prof. M'Gugin, on iodine inhalation, induced us to combine the two remedies and thus let the patient inhale the compound vapor.

The physician who is well acquainted with the respective properties of these two remedies will readily see that their local use, under many circumstances, is capable of accomplishing much—at least temporary—benefit even in phthisis and in ozœna, and bronchitis probably, under favorable circumstances, for effecting cures.

CAN A PERSON BE ANÆSTHETIZED DURING SLEEP?

This is a very important question, and one which has medico-legal bearings. This question was under discussion before the Medical Society of Buffalo, at its meeting for September 6th, 1859. The discussion was reported in the *Buffalo Medical Journal* for October, 1859. Prof. Hamilton expressed the opinion "that a person during sleep cannot be anæsthetized by chloroform." Most of the members present coincided in this opinion. Dr. Wyckoff, however, dissented. In the *Buffalo Medical and Surgical Journal and Reporter* for November last, Dr. T. F. Rochester, referring to the subject, says that he has recently, "with the greatest facility, twice completely anæsthetized a sleeping child with a much less amount of chloroform than was required by the same patient when awake."

We confess to having been skeptical in regard to the possibility of effecting anæsthesia under these circumstances. We had supposed that if the cloth or sponge were brought near to the face, the unnatural sensations which its inhalation would produce would awaken the subject before the anæsthetic properties of the agent were manifested. If the chloroform was so remotely placed as not to excite these unnatural impressions, we had supposed the vapor would be so diluted with atmospheric air as to render it inefficient as an anæsthetic. These suppositions, however, are worthless when opposed to actual facts. The experience of Dr. Rochester, if supported by the experience of others, is of the first importance in a medico-legal point of view.

PERSULPHATE OF IRON IN "BRIGHT'S DISEASE."

Before the Buffalo Medical Association for October 1st, as per report in the *Buffalo Medical and Surgical Journal and Reporter*, Prof. White speaks highly of the persulphate of iron in "Bright's disease."

He reports a case that proved rebellious to other remedies, in which this remedy was used with very marked benefit. The solution of this remedy was employed in doses of fifteen drops three times daily, at first, and subsequently increased to thirty-drop doses. At the end of three months, Prof. White says:—

"He works a part of the time at his trade, and bears exercise without exhaustion. The œdema in the lower extremities is greatly lessened, and the size of the abdomen greatly reduced. Upon testing his urine with heat and nitric acid, no albumen could be detected."

Prof. Rochester also reported a case of the same disease, treated in like manner, with the same happy results.

BELLADONNA IN HOOPING-COUGH, INCONTINENCE OF URINE, ETC.

In the *American Medical Monthly* for October, Prof. A. Jacobi has a clinical lecture upon belladonna in the treatment of diseases of children. The article is deserving of entire reproduction, had we the space at command. A few extracts must suffice.

"Belladonna is the most powerful remedy in hooping-cough. I scarcely remember a single case in which its administration, for years past, proved unsuccessful in shortening the duration of the process. The result obtained by me has generally been this: That a well-developed case of hooping-cough, after the diagnosis was made certain beyond a doubt, would last for only three or five weeks longer, instead of running through its full course of months and quarters of a year. The effect is generally not a sudden one."

After considering the objections to its use, and remarking upon the inefficiency of the doses, as prescribed by many, as for instance a sixtieth, a forty-eighth, or a thirtieth of a grain, he says:—

"These doses could not but prove unsatisfactory, and thus it happened that the remedy was misappreciated and given up. * * * *

"Infants of six or eight months of age, affected with hooping-cough, require a sixth of a grain of either the root or the alcoholic extract three times a day; children of three or four years tolerate three doses, each of half a grain. These doses appear to be very large in proportion to those tolerated by adults, but it is a fact which can be easily verified, that the effect of belladonna on the pupil and brain will hardly ever be perceptible in children from these or smaller doses."

In regard to the objections to these full doses, he observes that—

"I, for my part, soon found that those children suffering from hooping-cough who exhibited general erythema from an apparent overdose, recovered soon, while others, in whom no such symptom was observed, remained sick for a long time; and continued experience has proved that the occurrence of this symptom is absolutely necessary for the full remedial effect. To obtain a cure in hooping-cough, the remedy *must be given* in a dose sufficient to produce *erythema, or at least a flushed condition of the face*, and, as it were, feverish appearance after every dose of belladonna. Thus the dose is to be gradually increased until this result is obtained. It is a remarkable fact that very young infants may take unproportionately large doses; at all events, I do not remember a single case in which less than half a grain was taken in the course of a day."*

* The italics are ours, wherever used in this article.

The following is one of Dr. Jacobi's prescriptions:—

"℞.—Extr. bellad. alcoh., gr. vj;
Aquæ, f℥ss. M.
"S. Twenty drops three times a day, (for a child of three years.)"

We may here observe that Prof. Jacobi's experience in the diseases of children is, perhaps, unsurpassed by that of any man of his age in America, and his opinions are entirely worthy of credit. To many, and perhaps most, of our readers this last remark is entirely unnecessary.

The doctor does not lay claim to priority in the use of belladonna in hooping-cough. We have used the belladonna in hooping-cough since 1852, and with most satisfactory results. We commended it in the *Amer. Med. Monthly* for 1859, also in the same journal for 1860. In the August number of the *American Journal of Medical Sciences* for 1839, Dr. Jackson, then of Northumberland, published a paper upon the use of belladonna in hooping-cough. In the same journal for October, 1852, Dr. Hiram Corson has a paper upon the same subject. Dr. Corson was in the habit of curing his patients in from *one* to *two* weeks. We think Prof. Jacobi would get better results by giving *smaller doses oftener repeated.* At least, this is our method. We have followed Dr. Corson, and as the subject is of great importance, we shall quote Dr. Corson's method. He says:—

"I put eight grains of extract of belladonna into one ounce of water. *Nine drops* of this solution contained just *one-eighth* of a grain of the extract."

In a case reported, Dr. Corson says:—

"Of this I directed him to give his child nine drops every *two hours until the pupils were dilated, face flushed, mouth dry, and vision confused.* If these effects were not produced the first day, *then to increase the dose three drops daily.* I was informed that the child was entirely cured in a week."

Returning to Dr. Jacobi's lecture, we quote a remark upon the influence of belladonna over *incontinence*:—

"Incontinence of urine is another of the troublesome affections which are in almost all cases easily removed by the administration of belladonna. From the almost regular effect it has, we must conclude that the majority of cases depend on increased irritability of the bladder, which is relieved by the administration of the narcotic."

Prof. Jacobi says he has given the belladonna in every case of incontinence of urine that has

come under his observation during the past four years, and he has

"Not *seen a single case in which the medicament proved unsuccessful.* A complete cure was generally obtained in half a week or a week, by doses of the same strength, or a little less than those given in hooping-cough."

In incontinence of *feces*, Prof. Jacobi has found the belladonna equally efficacious.

The doctor has no confidence in the prophylactic powers of belladonna over scarlet fever. His opinion is based upon a carefully observed personal experience. The medicinal powers of belladonna, like those of arsenic and strychnine, have not been sufficiently appreciated.

POISONING BY BELLADONNA—RECOVERY.

In the *Lancet and Observer* for October, Dr. Samuel Willey, of St. Paul, Minnesota, reports an interesting case of poisoning by belladonna. The patient was his own "little boy," whose age is not given; he ate about thirty-five grains of extract of belladonna. Within half an hour the child's stomach was emptied by means of an emetic. Olive oil was given by the mouth, and subsequently calomel and castor oil, with a view to cathartic action. Twelve drops of laudanum were given by enema, while strong *coffee* and vinegar and water were, for the first *ten hours*, relied upon mainly as remedies. At this juncture

"Complete coma ensued, the face and lips became livid, extremities cold, radial pulse scarcely discernible, breathing difficult and stertorous, with total insensibility to pinching, pricks of pin, slapping, dashes of ice water over face, or vapor of ammonia, and speedy death seemed inevitable."

At this stage, a galvanic battery was brought into requisition, and the

"Strongest possible shocks administered over the regions of the thorax, neck, and spine particularly."

In three or four hours slight improvement became manifest. For fourteen hours the shocks were continued at short intervals. Coffee and beef-tea were the only remedies administered during this interval. The patient made a good recovery.

We quote this case, partly from the interest which attaches to it from its recovery from alarming symptoms, through the instrumentality of electricity, and partly for the purpose of making a remark or two upon the case.

We believe *opium* to be one of the best remedies in cases of poisoning from belladonna that can be administered. After emptying the stomach, we should have given it in repeated doses, not so much with regard to *quantity* as to *effects;* we should have persevered with it until the pupils had been made to contract, unless symptoms of opium poisoning had supervened. Strychnine, counter-irritants to the spine, and electricity would have been good adjuvants.

Coffee, or its principle, caffeine, is a good antidote to opium poisoning. Regarding the action of opium and belladonna as almost antagonistical, at least quite dissimilar, if coffee is an antidote to opium poisoning, is it probable that it is an important remedy in belladonna poisoning? May it not, in the case reported, have been worse than useless? In the case reported, opium was given but once, and then only by injection.

"Not the *slightest* contraction of the pupils occurred until *twenty-two hours* after the accident, and then but slightly."

Purely antidotal remedies should have brought about contraction of the pupils to a normal *standard.*

THE DIVISION OF THE GUSTATORY NERVE, AND THE LIGATURE OF THE LINGUAL ARTERY, IN THE TREATMENT OF CANCER OF THE TONGUE.

The principal object of the author was to revive an operation which had been devised by Mr. Hilton, once practiced by him in the year 1850, and though of much value, never again performed. Among the many sources of the peculiar painfulness of cancer of the tongue, irritation of the fifth nerve could be assigned as occasioning the pain of so much of the tumor as was in front of the fauces; the tenderness of the ulcer, the pain in the regions of the parotid, ear, temple, and crown of the head, and the excessive secretion of saliva. All these being traceable to the encroachment of the disease on the gustatory branch of the fifth, the section of that nerve between the disease and the brain should relieve them. The cases showed much relief to be instantly afforded when the nerve had been divided. The operation, as practiced by Mr. Moore, consisted in cutting through all the soft structures on the inside of the ramus of the jaw by an incision, commencing immediately behind the last molar tooth, and extending three-quarters of an inch in a direction toward the angle of the jaw. The only structures which could be divided by such an incision were the mucous membrane and a part of the mylo-hyoid muscle, with the gustatory nerve descending forward between them, about half an inch from the tooth, and nearly at a right angle with the direction of the incision. It was

advisable to operate with a curved knife, as the alveolar ridge might shield the nerve from the edge of a straight one, and also to cut outward quite to the bone. The author had operated in five cases of cancer of the tongue, three of which were given at length. The relief was immediate. Salivation, the pains and tenderness of the tongue, and the reflected irritation of the fifth nerve, were all gone at once. Soreness of the wound, with swelling, remained for some days; but after that the patients took food, swallowed, and spoke with comparative ease. They slept, and improved in general health. The tongue in each case was absolutely insensitive on the side operated on from the anterior pillar of the fauces forward, and no sapid substances aroused taste in those parts. One patient frequently, on awaking from sleep, found himself chewing the cancerous mass in his tongue between his toothless gums, but the compression occasioned him no pain. The relief was permanent so far as the gustatory nerve was concerned, but when the disease invaded the area of the glosso-pharyngeal nerve, new pain arose. One patient had been operated on in August, and had no return of pain up to the present time—a period of three months. In the last mentioned case the author had attempted to benefit the patient, in whom extirpation was unsuitable, by withdrawing from the tumor its nourishment of blood in addition to its nervous influence. He accordingly tied the lingual artery on the side of the disease two days after he had divided the gustatory nerve. The ulcer became paler after the operation, but neither sloughed nor healed, and in five weeks the whole tumor was perceptibly smaller than before the operations. From that time the tumor began again to increase. The author had desired, upon the renewal of growth in the tumor, to tie the opposite lingual artery also, but the patient was content with the amount of ease which he was enjoying, and indisposed to incur a renewal of the pain which had followed the first operation.—*Royal Medical and Chirurgical Society—London Med. Times.*

VAST ABSCESS OF THE BRAIN WITHOUT SYMPTOMS.

M. Richet related in the Society of Surgery the case of a youth, aged 18, who applied as an out-patient at the St. Louis, on account of a purulent discharge from the ear. So little inconvenience did he feel from his ailment, that he was with difficulty persuaded to enter the hospital for treatment. With every appearance of excellent general health, he died suddenly next day, immediately after the occurrence of a convulsive paroxysm. At the autopsy, the petrous bone was found diseased, but the dura mater covering it had not undergone any change. The cavity of the tympanum was filled with pus, which obtained its discharge both by the meatus and Eustachian tube. All the convolutions of the left hemisphere had become effaced, and a collection of pus occupied the whole of the sphenoidal and occipital lobes, the parietal lobe remaining alone intact. Very small abscesses were scattered throughout the parietal lobe. This patient had never manifested the slightest intellectual disturbance, and no symptom indicated the existence of cerebral lesion, when the pus, bursting into the lateral ventricle, caused instant death.—*Gazette Hebdomadaire*, No. 46.

TREATMENT OF CATARACT BY EVACUATION OF THE AQUEOUS HUMOR.

Dr. Sperino, of Turin, states that in the course of his investigations on the effects of evacuation of the aqueous humor in the treatment of affections of the bulb of the eye, he has found that if, in individuals suffering from cataract, the aqueous humor be evacuated daily, or every two or three days, the opaque lens gradually reacquires its pellucidity, the sight as progressively improving. Even in those cases in which complete success is not attainable by means of this evacuation, this, by ameliorating the condition of the vascular functions of the interior of the eye, places the individual in more favorable conditions for the subsequent performance of an operation. However, in many cases the success has been complete; and, contenting himself at present with announcing the fact, Dr. Sperino is about to publish an account of the researches which led him to the discovery of the mode of procedure, and of the relative amount of success which attends its employment in the different forms of cataract.—*Union Médicale*, No. 143.

FATTY DIARRHŒA ATTENDING DIABETES.

M. Bouchardat describes a symptom attending diabetes, to which he gives the name of pimelorrhœa. It sometimes happens that, after the quantity of urine has been reduced even to the normal standard, the general health of the patient continues impaired. This is generally attributable to loss of appetite, or insufficient or improper nourishment; but sometimes, even though the appetite and the food be apparently good, there are irregular, frequent, and abundant alvine evacuations. Many diabetic patients have obstinate constipation, accompanied periodically by very copious alvine dejections, and sometimes by bilious vomiting, followed by extreme prostration. M. Bouchardat relates, in illustration, the case of a diabetic patient under his care, whose urine had become normal in quantity and quality. A large amount of starchy food was taken, and still the patient became daily more weakened and emaciated. On examining the stools, which occurred five or six times in twenty-four hours, M. Bouchardat found them copious, black, with little odor, and of semi-solid consistence. At the time when they were discharged, a large quantity of oil floated on them, and became solid on cooling The fat evacuated consisted of oleine, margarine, and stearine, with traces of cholesterine. This discharge of fatty matter took place in spite of

the removal, as far as possible, of all fat from the food. On several occasions, however, M. Bouchardat succeeded in diminishing it by reducing the supplies both of fat and of starchy matters in the food, and by ordering regular and energetic exercise. The patient's occupation, however, being sedentary, prevented him from carrying out the instructions fully; and he died after a severe attack of diarrhœa. M. Bouchardat believes that this fatty diarrhœa attending diabetes results from the exaggerated transformation of the starchy materials into fat; and that it is only a transformation of diabetes or glycosuria. In diabetes the sugar is carried off by the urine; in pimelorrhœa the fat is removed by the intestines. The symptoms in both forms of disease are the same, only they are more violent in pimelorrhœa than in diabetes. — *Bull. Génér. de Thér.* and *Brit. Med. Journal.*

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, FEBRUARY 22, 1862.

REMOVAL.—The office of the Reporter has been removed to the N. E. corner of Seventh and Sansom Streets, below Chestnut. Correspondents will be careful to note the change. tf.

THEORIES IN MEDICINE.

Theories in medicine, like the fashions of the day, are evanescent, changing. The fashion which governs the dress of to-day is not the same that ruled yesterday, or that may be in vogue to-morrow. And yet revolving as it were in a circle of large diameter, the disappearance of one is not only the signal for the reappearance of another, but the cycle once completed, begins not a round of *new* fashions, but a *new* round of old ones. So in medicine. Theories once considered sound and impregnable have been obscured to the vision by the rapid rising of new ones, and these in turn have disappeared to give place to others, till the cycle seems at last nearly completed, and the theories in medicine of to-day are many of them only a resurrection of ages long past.

The fashions of the present find their counterpart in the past, modified, it may be, somewhat by the fancied superior intelligence and refinement of the present, still not losing the marks which determine their essential identity. So in medicine. The popular theories of the present day, to some extent, have their roots extending back far into antiquity, and, save the inviting foliage and flowers with which they are now bedecked, have little to distinguish them from the age of the fathers.

So marked and prominent is this fact, that some have even doubted whether any actual progress has been made in medical science. Others have been disposed to regard progress as a farce, or as a mere will-o'-the-wisp that appears only to tantalize and to vanish. And still others have contemptuously rejected all new theories that are advanced, and regard them as innovations, not progressions.

Still, change keeps at work. Regardless of the croakings of the misanthrope, or the rantings of the self-conceited and self-sufficient, the mighty element of progress, like the leaven in the meal, shows its workings in the remotest corners of human knowledge. If there be not elements from which new combinations can be formed, there are yet elements around which new attractions may be made to gather as a nucleus, and from which brighter and more brilliant rays of light may radiate. The old Brunonian system of pathology, which recognized but two classes of diseases affecting the system, sthenic and asthenic, may be exploded; but the Brunonian practice of stimulation has become the element, gaudily decked with the fascinating charms of art, which has reappeared in our age to force itself upon our adoption. Who now objects to stimulation in one form or another, in the diseases of the day? Nay, what physician does not employ it freely, largely? And who shall say that within a few years to come some bold thinker and heroic actor in medicine, "tired of seeing patients die with their skins filled with whisky," and their senses benumbed with opium, will not take up again the lancet, now grown rusty in its case, and demonstrate its benefits by rescuing his patients from certain death? Who now deems the blood-letting "*coup sur coup*" of Bouilland and his followers the proper theory of treatment in any disease? Yet it is but a few years since even that theory had its warm advocates. It has passed away among the rubbish of the past, but the lapse of time may bring it again into vogue, and in a new dress it may compel our admiration and belief. So the *expectante* practice of a few years past, the *vis medicatrix naturæ*, the power in nature which, if not overpowered, enables her to shake off disease, has its counterpart in the teachings of our own day. We are cautioned to study the workings of nature, and throw in our drugs only when we can aid her strugglings to

rid herself of an enemy to her integrity. But this theory may yet be exploded and another turn of the wheel may bring into vogue the bold, heroic practice of a period still farther back. So also of particular remedies. Many which were once thought to be of great value have lost their place in the materia medica, and some that have thus been condemned as worthless or inert by scientific men, have been brought into requisition by old women and quacks, and as they grew in repute, regained their place in the Pharmacopœia.

Cullen, in his day, assailed the practice, then countenanced by one medical authority of some note, of giving *burnt toad* as a remedy in certain diseases. He fortunately succeeded in discarding that article from the materia medica; but the burnt toad still finds a counterpart in the use in this day of *horse-hoof* for epilepsy.

But these are only isolated cases, yet enough to illustrate the idea we intend to convey, and to show that the change which is constantly going on in the material world around us is but a type of that constant change which, like the rising and receding wave, carries upon its crested summit the opinions and theories of men, only to engulf them in the bosom of the deep at its return and give them a new chance to rise again with the returning surge. And thus has it been from the earliest ages of medicine down to the present. Opinions have constantly conflicted; theories of one age have given place to theories of another, each again, in the revolving cycle, reappearing in new form. And so the practice of one generation, or of one class of physicians, has also been in conflict with that of another, and each can point to standard authority in the medical literature of the past for a confirmation of his peculiar mode.

Now what is the meaning of all this conflict of medical opinions and practice? Is there no *real* progress? Do we but readopt the exploded theories the fathers discarded? Nay; this is one of the methods in which rea progress can be made. This is the crucible in which all opinions and theories are melted, and in which the pure gold of truth is separated from the dross of error. As each doctrine rises up from the sleep of the past to claim recognition in the present, some keen-sighted genius strips it of its old habiliments, till that which is true in it appears like the gold well refined, and that which is false disappears as the phantasm of the imagination. And so each step is really one in advance—*pro*gression, not *re*gression. If new theories are not actually promulgated, (there is nothing new under the sun, says the wise man,) still new methods of applying the old are introduced, and progress is thus evident. Medical doctrine and practice have undergone many changes from the days of Hippocrates to the present, and no doubt those of this day may pass away also like their illustrious predecessors. Be it so, if it be in the direction—as to the most casual observer is visible—of an improved hygienic and of a simplified treatment of disease. Be it so, if but the indications of nature shall be followed as the guide of our therapeutics, and natural rather than violent agencies be employed in eradicating "the ills that flesh is heir to." Theories are worthless unless they have for their foundation and superstructure something more substantial than the "baseless fabric of a vision." Opinions are of no value, save as they point to truth as the great end of all investigation. These may all pass out of fashion and be superseded by others, while the constant attrition of change and displacement will only bring out from the rubbish the brilliant gem we seek—truth.

SENATORS WILSON AND HALE AND THE MEDICAL DEPARTMENT OF THE ARMY.

A few days since Senator Wilson introduced into the Senate a resolution of inquiry into the management of the Government Hospital at Alexandria, Virginia. The remarks made by him and by Senator Hale were so astounding in their character, if true, that we preferred to wait further developments before commenting upon or publishing them. We confess to a disposition to regard the furious onslaught made upon the Medical Department of the Army, and "the complaints" relative to it "from all over the country," very much in the light of an electioneering scheme for the accomplishment of a particular sinister end. And especially have we so regarded them since those complaints have not, until now, assumed any tangible shape, but have been confined to vague and indefinite generalities. But these statements of grave senators in their places present the matter in a new aspect. Senator Wilson said:—

"There were complaints from all over the country about the Medical Department of the Army,

and he (Wilson) had no doubt that department was entirely inadequate to meet the wants of the army. He had seen certificates from sick soldiers that they had actually to go to the swill-tubs to enable them to live in the hospital at Alexandria. There were reports from all the hospitals that were disgraceful to the country."

And Senator Hale, in still stronger language, developing more the bitterness of the partisan than the candor of a well-balanced mind, said:—

"There is a perfect jam of dead logs at the head of the Medical Department. The Senator from Massachusetts (Mr. Wilson) has not gone far enough. The old fogy notion of promoting doctors who had dosed and dosed for forty years in the same old way, ought to be discarded, and we ought to call in to our relief the best medical talent of the country."

Now we are by no means opposed to reforms in any department where reforms are required, nor would we countenance, for a moment, any such manifest violation of the plain principles of sanitary science as is alleged of the hospital at Alexandria. But it strikes us that no man is justified in awakening suspicion of inhuman carelessness to the comfort of the sick, against those who have all the controlling motives of interest, of reputation, and of duty to urge them to the proper performance of their labors, without *first* ascertaining the precise facts in the case. Rumor, with her thousand tongues of mischief, is not a safe basis for complaints so well calculated to strike the hearts of the people with terror, and to bring odium upon the Medical Department of the Army.

Had Senator Wilson personally visited the hospitals at Alexandria and at Washington, he would have found them, if the statements of those who profess to *know* are at all reliable, not perhaps entirely free from imperfection in some of their sanitary arrangements—for the soldier in the hospital does not entirely lose the identity of the citizen at home, and abuses are not always corrected in a moment—but he would have found them, in general, clean, comfortable, well provided with food, medicines, and delicacies for the sick; and that if the sick soldier suffers for bread, beef, soup, chickens, wines, etc., it is the fault of the surgeon in charge, and not of the Department itself.

So, also, had Senator Hale taken the trouble to visit the Medical Department, he would have found there a *few men*, venerable on account of their age and acquirements, none who looked older than himself, *many* who are young and in the prime of life, and *none* who have not done far nobler and better service in their positions during this war than Mr. Hale in his comfortable seat in the Senate.

In regard to the condition of the troops, the statement of Rev. Mr. Weston, of Trinity Church, New York, and of an ex-surgeon of the English army, who have just visited them, that no army was ever so well provided for, bountifully fed, and in such good physical condition, gives a noble contradiction to these "reports" of "nobody in particular," upon which these charges in the Senate are founded. And the astonishing health of the army in a malarial region on the Potomac, and the small mortality in the hospital list, notoriously true as it is that most of their dead are sent to them in a dying condition, (most of them men who never should have been admitted into a regiment,) this astonishingly healthy condition ought certainly to give some proof of the efficiency of the medical staff, since no other staff, military or civil, does anything for the health of the troops. This grand and undeniable fact may well satisfy the public mind, and relieve the anxieties of the fathers and mothers, sisters and relatives, to whose hearts these most unjust insinuations have already carried many a pang.

EDITORIAL NOTES AND COMMENTS.

The Ether Question.—We have no design of reviving the dead controversy upon the ether question, or of introducing it, in any shape, into the columns of the Reporter. We simply note the fact that a suit has been brought by W. T. G. Morton against the New York Eye Infirmary for an alleged infringement of his patent, granted November 12th, 1846, for the discovery of sulphuric ether as an anæsthetic agent, and that on the 30th ult. the case was tried before Judge Shipman, of the U. S. Circuit Court. Witnesses were introduced to show the value of ether to the profession, which was declared to be beyond computation. The defendant in this suit was one of the signers of an appeal to the public in behalf of Dr. Morton, to obtain for him a compensation for his discovery, he having, as was stated, abandoned his patent in deference to the wishes of the medical profession. Quite a large sum was raised for him in New York City, in Philadelphia, and in Boston. Now that his patent has expired by limitation, he sues one of the parties who aided him in obtaining funds, for an infringe-

ment of his patent in using the article. The validity of the patent was discussed before the court, and Judge Shipman, taking the same view of it which was taken by the Attorney-General of the United States, decided that the patent was void, and directed a verdict for the defendants. The question now goes to the Supreme Court for final adjudication.

Pelvic Hæmatocele.—At the meeting of the New York Academy of Medicine, held on the 5th instant, Dr. J. Byrne, of Brooklyn, read a paper on the interesting subject of pelvic hæmatocele, illustrating his views on the pathology and treatment of that malady by cases which have lately occurred in his private practice. The doctor took exception to some of the views of Nélaton, Trousseau, Voisin, and others, and made an able and complete resumé of the whole subject, receiving the flattering congratulations of the president and several members of the academy for his labors. The paper is soon to be published in the Transactions of the Academy.

Hospital for Contagious Diseases.—It is remarkable that among the large number of benevolent and charitable institutions for which Philadelphia is noted, there are not ample provisions made for the treatment of contagious diseases. The present hospital building for this purpose, on Islington Lane, consists merely of an ice-house floored over. It is not even plastered, and the accommodations are meager indeed. During the past year the deaths from small-pox in the city amounted to over seven hundred, a number which bespeaks the pressing want of more suitable arrangements for the proper care of those afflicted with this malady. We are glad that the attention of Councils is to be specially directed to this subject. Not only is a new hospital needed, but also more careful and thorough attention to the subject of vaccination. If the latter be properly attended to, less absolute necessity will exist for large hospital accommodations.

The Illness of the Late Prince Albert.—The English medical periodicals are demanding that an official report of the illness of the Prince shall be published by his medical attendants. In the absence of such reliable record of his case, there are many diverse reports in reference to the immediate cause of his death. It will be remembered that only three days previously to his decease, it was officially announced that there were "no unfavorable symptoms." The London correspondent of a provincial paper says that "it is asserted that in all probability the Prince's life could have been saved had he obeyed the instructions of his physicians; but that he was extremely averse to stimulants—the grand remedy in such a case, sustaining the body while nature worked the cure—and that he positively refused to take them until the Wednesday before his death, when the illness had so completely prostrated him that it was too late."

Surgeon-General Finlay.—The attacks upon the Medical Department of the Army, and especially upon the distinguished surgeon who stands at its head, have attracted the notice of both the secular and religious press. From one of the latter class, *The Presbyterian*, of this city, we make the following extracts. After speaking of Surgeon Finlay as a man "of unblemished Christian character, incorruptible integrity, long and faithful service, and not perhaps surpassed in his professional skill," it says:—

"We have been surprised to learn that a clique of busy meddlers, not, we believe, of the medical profession, has been perseveringly engaged in assailing his reputation, and affecting his position, and as there was no hope of effecting their object by a manly and open impeachment, the attempt is artfully made to accomplish it by indirection. We understand that a bill has been framed, and placed in the hands of Senator Wilson, already known as an advocate of a bill for depriving our worthy chaplains of a competent support, in which such a reorganization of the Medical Bureau is contemplated as would retire Dr. Finlay from the post he so worthily occupies." * * * "The community, which has been so devoted to the Government, and rendered it such substantial aid, should know whether one of the best and truest men in the army should be made the victim of male and female busy-bodies, to whom his religious character seems to be his chief objection. We mention no names at present, but may be compelled to do so, if this ungracious conspiracy is still persisted in."

Loss of Horses at Sea.—The *Scientific American*, in an article on the great mortality among our army horses, says that of 130 excellent horses sent from Boston to Ship Island, 68 were lost during the voyage, owing to the improper method of packing them on board. Their flimsy stalls broke down when the ship labored in the sea, and the animals were dashed from side to side, kicking and tramping one another to death.

Correspondence.

DOMESTIC CORRESPONDENCE.

Detroit, Feb. 12, 1862.

Messrs. Editors:—I have been gratified in reading your article on the Sanitary Commission, published under date December 28th, 1861. It has been a question with me if this Commission has not done more hurt than good, especially in the recommendation of quinine as a prophylactic for intermittents. I must question the propriety of giving quinine in a perfect state of health for the purpose of preventing an ill effect from malaria. Those cases that have been reported as being benefited by the supposed prophylactic power of quinine, if theory or reason is good for anything, no doubt in such cases there existed an incipient form of disease—at least, were under the influence of malarial poison.

It was my privilege to spend a few weeks in our army—in Virginia, on Arlington Heights—last autumn. A number of cases of the form of disease that prevailed at that time came under my observation. Almost every case assumed, at first, an intermittent type of fever, attended with a congestive form of diarrhœa. I observed in the treatment quinine and opium were given liberally in combination—in many of these cases the fever assumed a continued form, with increased enteric symptoms. In this state of the disease they were removed from the army hospital tents to one of the hospitals in Washington or Georgetown, where they were treated for typhoid fever, as I was informed. A few cases were attended by myself. In all of these cases I prescribed opium with hydrarg. c. creta, sinapisms over the abdomen until the tenderness upon pressure was relieved, after which quinine was used with marked benefit. One of these patients had a relapse before I left; the symptoms were much severer than in the first attack, ten days or so previous. The surgeon of the regiment remarked, in examining, at the *time of the relapse*, that it was frequently the case that his patients had a relapse, and *that* this was one of the ordinary type, and that he would now have a course of typhoid fever, and there could be no escape. I prescribed for him, as at first, large doses of opium combined with mercurial chalk, aided with counter-irritants over the abdomen, until the congestive form of disease was subdued, after thirty-six to forty-eight hours' duration. Quinine was then administered with the happiest effects. How much this Sanitary Report, in favor of the prophylactic effects of quinine, has contributed to this *doubtful* practice, to say the least, is not known. One thing is certain, so far as I could learn; our troops never had quinine given them unless on the sick list. The Sanitary Report would seem to recommend it for the well and healthy. I am fully convinced that a mild form of disease was converted into an acute form by the too early administration of quinine, after which they were treated at one of the hospitals in Washington or Georgetown for *typhoid fever*—a *polite and learned prognosis*. A quinine treatment was followed up, and *some* did live through it. How much the report emanating from the Sanitary Committee led to the abuse of this remedy, of course, is mere presumption to say. The duty of this Sanitary Commission falls naturally, it seems to the writer, on the Brigade Surgeon and the Commissary; if so, why not abolish the whole system as worse than useless? W. D. S.

NEW YORK CORRESPONDENCE.

At a meeting of the surgical section of the New York Academy of Medicine, held December 27th, 1861, at the house of Professor James R. Wood, the discussion relative to Dr. George K. Smith's paper on "The Insertion of the Capsular Ligament of the Hip-joint and its relation to Intra-Capsular Fracture, etc.," was continued by Professor Alfred C. Post. He said that he appreciated highly the laborious and scientific investigations, the results of which Dr. Smith had presented to the section; but that he was not prepared, without further demonstration, to assent to all the conclusions therein arrived at. He thought that Dr. Smith's fifth proposition was founded on an error, or at least on a statement which had not yet been demonstrated to be a fact. It was as follows: The absorption by which the neck of the bone was shortened after fracture, was an event which preceded the union of the fragments. Dr. Post asserted that it appeared to him more probable that the union, in such cases, took place in the first instance, and that the interstitial absorption was a subsequent event. This view would seem to be supported by the fact that before union had taken place, the fragment connected with the head of the bone had a very imperfect supply of the veins or lymphatics through whose agency the absorption would be likely to occur. Now in order to demonstrate Dr. Smith's

proposition, Professor Post further remarked, that it would be necessary to present a series of preparations taken from patients who had survived intra-capsular fracture for variable but known periods antecedent to union, and to show that there was a progressive shortening of the neck before the occurrence of union. He also objected to the sixth, seventh, and eighth propositions, and said that the eighth was founded on the same error or unsustained hypothesis as each of the three preceding ones, namely, that the shortening of the neck by absorption precedes the union of the fragments by bony or fibrous tissue. Professor Post said, moreover, that the principal interest attached to Dr. Smith's paper appeared to him to be the demonstration that there is a considerable diversity in the extent of the portion of the cervix femoris which is included within the capsule in different subjects, and that the portions included within the capsules are equal on the two sides of the same subject; besides this, Dr. Smith had further declared that there is a considerable portion of the cervix intervening between the insertion of the capsule and the inter-trochanteric lines.

Professor Post next proposed a new classification of fractures of the cervix femoris, dividing them into two classes, viz., "fractures between the caput femoris and the inter-trochanteric lines, and fractures at the inter-trochanteric lines extending more or less into the shaft of the bone." He proposed to call the first class "intra-cervical," and the second class "extra-cervical." He expressed it as his opinion that these two classes of fractures would be found to correspond very nearly with those which have hitherto been described as "intra-capsular and extra-capsular." After proposing several methods to assist in the diagnosis of the different classes of these fractures, he concluded his remarks.

At a subsequent meeting Dr. George K. Smith replied, at length, to the objections made against his propositions by Prof. Post.

Dr. Smith acknowledged that the head of the bone was, to a great degree, deprived of veins by the fracture, and that it was, by the same accident, deprived of its arteries to a corresponding extent. After the fracture the head of the bone is supplied with blood by one, and, in some cases, two small arteries, which pass through the ligamentum teres to the head of the bone. The fragment of the neck attached to the head being thus imperfectly supplied with nutrition, he argued, would be absorbed with greater rapidity than the fragment attached to the shaft, (which, after the fracture, is abundantly supplied with blood,) provided that each fragment is furnished with a sufficient number of vessels to accomplish its absorption. While he freely admitted a preponderance of the veins of the femoral fragment over those of the fragment attached to the head, it must be remembered that absorption of the upper fragment, through the agency of veins, was not held in check by the antagonistic force of an abundant nutrition.

With regard to the supply of lymphatics to the head of the bone, Dr. Smith stated that the minute distribution of the lymphatic system was, as yet, imperfectly understood by anatomists; and cited authorities to prove that, while some authors state positively that bony tissue is supplied with lymphatics, others claim that they have not yet been discovered in bone; others, again, maintain that it is *doubtful* whether this tissue is supplied with lymphatics.

Dr. Smith asserted that further anatomical investigations were necessary before the opinion of Prof. Post could be admitted as a fact; that whatever the agency might be, by which the result was accomplished, absorption of the head and neck of the bone did actually occur, without any attempt at union of the fragments, and that the rapidity of the absorption was sometimes so great that nearly the whole of the neck had been known to be removed in less than a month. Occasionally the head of the bone was entirely removed by absorption; therefore he could see no physiological necessity for absorption of the neck to be preceded by bony union of the fragments. In proof of such absorption, he quoted from page 42, "Smith on Fractures," and also, as further evidence, the following proposition given by Prof. Post at the former meeting: "In intra-cervical fractures, whether bony union takes place or not, the cervix femoris becomes greatly shortened by interstitial absorption, and, after the lapse of several weeks or months, the limb may be shortened to the extent of two inches or more." Dr. Smith also remarked that it would be almost impossible to obtain such a series of preparations as Prof. Post had suggested might demonstrate a progressive absorption of the neck, before union of the fragments; for the specimens must be obtained immediately after union, or else Prof. Post would claim that the shortening by absorption did not occur till after the fragments were united.

Now as the specimens could not be examined till after the death of the patient, and it would seldom happen that a patient, whose vital powers were sufficient to secure bony union of a fracture of the neck of the femur, would die immediately afterward; that, even if the specimens could be obtained, they could not be expected to illustrate a regular, progressive absorption, since the rapidity of absorption was inversely proportionate to the abundance of the nutrient supply, which varied so greatly in different persons that, in some cases, the entire neck of the bone had been known to be removed in a few weeks or months, with no attempt at union; while, in other cases, as many years transpired with a portion of the neck still remaining, and the fragments ununited,—he thought that the theory of Prof. Post involved a most disastrous consequence, since parts newly formed are more readily removed by absorption than those of longer standing; and we are to expect that the callus, by which the fragments are united, will be first attacked, and that disunion will be the result long before the whole of the neck shall have been removed. Instances of the absorption of callus, and consequent disunion of the fragments, are found in Gross' Surgery. The new classification proposed by Prof. Post involved the vexed question of osseous union within the capsule in more obscurity than before, since an intra-cervical fracture, instead of "corresponding very nearly with an inter-capsular fracture," as stated by Prof. Post, might be either an intra-capsular fracture, an extra-capsular fracture, or a fracture partly within and partly without the capsule.

Dr. Post had stated that "in intra-cervical fractures bony union very nearly occurs." Numerous specimens had been exhibited, in which the line of union was either entirely without, or partly within and partly without the capsule; but Dr. Smith asserted that he had yet to see positive evidence of bony union entirely within the normal capsule. If, therefore, Prof. Post meant to be understood to say that bony union of intra-capsular fracture did occasionally occur, Dr. Smith thought that Dr. Post required us to admit as a fact that which surgeons had labored for fifty or one hundred years and failed to prove.

Dr. William R. Donaghe then followed; he thought that the shortening of the neck preceded the union of the fragments; that this shortening was mainly at the expense of the fragments attached to the shaft, and probably the fragments attached to the head also suffered some loss. This most interesting discussion has been adjourned to another meeting. Anatomists alone can appreciate its value. Expect diversified intelligence in my next epistle. Gourmet.

SYPHILIS SUCCESSFULLY TREATED WITH PODOPHYLLIN.

Rochester, N. Y., Feb., 1862.

Mr. H., a native of Ireland, thirty-eight years of age, a blacksmith by trade, physically rather frail, especially for a man of his calling, very intemperate, and decidedly of a scrofulous diathesis, presented himself to me for advice the fore part of last October. He was then complaining of a very sore throat; swelling and tenderness of the submaxillary and inguinal glands; and a syphilitic eruption on the forehead, and hairy scalp. On examination, I found it to be a proper and severe case of secondary syphilis. It was making rapid progress in the throat, fauces, and nares; and his voice had the peculiar obstruction observable in acute angina. I at first applied a little mercurial ointment to the swollen glands, after which I used Lugol's solution, ditto, and prescribed an active purgative of calomel, as he was much constipated at the time, and gave him half a grain of podophyllin pills, one to be taken three times a day, also the Lugol's solution to be applied to the glands each night, until I again saw him.

In five or six days he again called, somewhat improved; the throat better; the swelling and sensitiveness of the glands gradually lessening; and the eruption of the scalp disappearing, and drying up; with a loosening of scabby, bran-like patches, bringing a quantity of the hair with them. I now prescribed the podophyllin in half-grain doses, as before, to be taken, however, but twice a day, morning and night, in connection with small doses of iodide of potassa, and an occasional cathartic.

About this time Mrs. H., his wife, came to me with a syphilitic bubo in the left groin. I adopted nearly the same course of treatment with her, with but the little variation necessary for the local treatment. The constitutional treatment was much the same, and with the same happy effect; she soon recovered.

I saw him from time to time, with but little variation in the treatment, and he *rapidly recovered his health.* It is unnecessary to enter into the minute details of the case; suffice it to say

that the podophyllin was the *staple* remedy used. The mercurials, as far as alterative results were concerned, were omitted. I saw him a short time since, enjoying, as he said, much better health than he had for some time previous to his illness. This was a bad case, and a bad stage of the disease, saying nothing of the unpromising constitution, for a basis to build upon. However, the treatment exceeded my most sanguine expectations, for I had not looked for this perfect *cure*, and so readily.

The active principle of the podophyllum peltatum, in small doses, undoubtedly acts as an alterative upon the system, and thus holds a specific relation to syphilis. It is decidedly safer than mercury as that is often used, and sometimes abused, and a few trials of the podophyllin will decide whether it be as efficacious; at all events, it is worth the trial.

W. M. Fleming.

ARMY CORRESPONDENCE.

General Hospital, Fort Monroe, Va., Feb., 1862.

Gentlemen:—During the month of December and January last, this hospital has had, on an average, 275 sick in its wards, a large proportion of which were admitted with rubeola, and suffered, as usual with adults, severe pulmonary irritation. About 30 cases of febris typhoides, almost every one of which had some pulmonary complication, and several sunk from pleuro-pneumonia and double pneumonia, none, almost, having any abdominal lesion of serious nature. Whereas, during the months of October and November, deaths occurring in this disease were in consequence of perforation of the intestine. There was admitted about 40 cases of mild remittent and continued forms of fever, and only 5 or 6 of the intermittent form.

Several cases of a very interesting character, namely, cerebro-spinal meningitis, were treated, but all died, with the exception of one, soon after admission. This one lingered for some weeks, and finally sunk from sudden increase of effusion in the ventricles. All these cases were examined after death, and extensive depositions of lymph were found in the cavity of the spinal arachnoid and over the medulla oblongata; and in one case, over the entire cerebrum and cerebellum. In one, the lateral ventricles were greatly enlarged and distended with sero-purulent fluid. The other cases presented no unusual enlargement of these cavities.

Three cases of general capillary bronchitis, and one of lobular pneumonia, which promised recovery, were carried off by pleuritis, which, at one time, seemed epidemic, attacking every one who had fever or any pulmonary affection in the house.

Variola made its appearance in the house; but a prompt removal to a distance from the fort prevented any spread of the disease. There is now only one case of the kind in the pest-house, and that came from a merchant vessel. Parotitis has been, and is quite prevalent among the contrabands, many of whom are laid up from the common metastasis. I have met with only one case occurring in a white person here.

Diphtheria has been in the house about two months, and during the last week two deaths from that disease have occurred.

There has been, on an average, 30 surgical cases in the ward, a majority of whom are returned prisoners from Richmond, where they had laid a long time, poorly fed and cared for. Those with amputated limbs mostly presented protruded exfoliating bones, and very few with good stumps.

Several cases of gunshot wounds of the humerus, among the Richmond prisoners, were in a bad condition, and interesting, from the fact of foreign bodies found in the medullary cavity, where they had laid a long time, giving rise to severe trouble. All did well, after the removal of the bullets, rags, and old bones.

One interesting case of gunshot of the head of the humerus is being fed up to a condition for resection.

Two cases of gunshot through the tarsus have done well without that alternative, although considerable caries of the bones at one time existed.

Two gunshot fractures of the femur, one in the upper third, and one through the trochanters, are interesting, on account of good union occurring in one in eight weeks, and in the other in five weeks, though discharge continues, and some small portions of exfoliated bone continue to escape from the wounds.

One case of amputation of the thigh, in the middle third, came to us from Richmond, with the remaining portion of the femur dead. He is doing well, and exhibits fourteen bayonet wounds in various parts of his body.

The attendants in the hospital are all soldiers. Eight very comfortable rooms are reserved for sick officers, and one hundred beds kept vacant,

for any emergency that may occur in this division.

I desire to call the attention of those interested to the use of the hypodermic syringe, with morphia, among wounded men on the field and in transportation. Men with fractures of the bones of the extremities bear movement with comparative comfort, even where the parts are not adjusted or secured; and the reduction of dislocation or fracture is effected with ease to the surgeon, and without suffering to the patient. It is a convenience to have a solution ready prepared which may be carried in the pocket with the instrument. It should be of definite strength—say morph. sulph. gr. j; aquæ destillatæ, gtt. xl. Twenty drops of which, or more, may be used at once. The syringe should be plunged deeply into the muscles, near the site of the injury, avoiding, of course, the track of great vessels.

During the last two years it has been my practice, when called to a case either of fracture or dislocation, to first perform this simple operation, and the adjustment has always been rendered easy and much less painful to the patient.

R. B. Bontecou,
Brigade-Surgeon, in charge of General Hospital.

The *Cincinnati Lancet and Observer* has an army correspondent from "tother side of Mason and Dixon," who has been so fortunate as to receive the appointment of "post-surgeon" at one of the "closely guarded" fortresses specially appropriated for the reception of such as he. The doctor takes the matter very coolly, finding no fault with the restriction of his freedom, or with his quarters, but improves his leisure moments, as every medical man should, in giving utterance to his cogitations for the benefit of his fellow-practitioners who do not enjoy his opportunities for observation. Alluding to the importance of medical as well as surgical attainments to the surgeon in active service, he says:—

"If the appointing officers have made as injudicious selections as the Confederates, there would be but little use for any other ammunition. The practice having been to commission fledgelings, (favorites, of course,) while hundreds of eminent practical physicians are serving in the ranks as privates. If such has been the course of favoritism on your side of the line, I should think that there would be but little need of powder and lead to put a speedy end to the war. I see, though, that you have some excellent appointments; among whom are many of my classmates of the Cleveland Medical College, prominent among whom is Dr. H. R. Cushing, of the 7th Ohio. I did not have the pleasure of speaking to him at 'Cross Lanes,' though in sight of his regiment at the time of the battle."

In reference to the diseases of camp, he further remarks:—

"The type of disease most prevalent in 'Dixie Camps' is a grave form of typhoid fever, induced more from the want of sanitary precaution than exposure of the soldiers; the camps and environs being public *privies* and cess-pools of filth and stench from decaying beef-heads, entrails, and other refuse of the camp. But as there is always a *distinguished surgeon* at the head of medical affairs in camp, who prides himself upon his cutting and picking capacities, such minor things as cleanliness in camp, and rational treatment of the unfortunate sufferers, are either carelessly or willfully overlooked."

We take pleasure in copying the following interesting communication from Dr. D. C. Peters, U. S. Surgeon at Fort Warren, which we find in a late number of the *Boston Medical and Surgical Journal*. It was addressed to his friend, Dr. Dale:—

Fort Warren, Boston Harbor, January, 1862.

"Dear Doctor:—At your solicitation, I herewith inclose to you a table of diseases treated at this hospital during the months of November and December, 1861. The maladies enumerated in the accompanying list have occurred mostly among the prisoners of war brought from the South, and who consequently were unacclimated.

"It may, perhaps, be interesting for me to here make a few general remarks in connection with the table, as the result of my observation, in treating a body of men differing greatly both in physical and personal appearance. The dread at the approach of cold weather was universal among the prisoners, and I am not sure but that its onset was mentally a relief to them. Through various sources, but mainly through the charitably-disposed people of Boston and its vicinity, they are greatly indebted for a supply of warm clothing, and also for other solid comforts. Indeed, everything humanity could dictate has been done to make their imprisonment free from barbarity, and I know they have learned a lesson therefrom which will not soon be forgotten. The question may be asked, why, then, has sickness prevailed to such an extent among them? The answer can be readily given, by one who has observed their want of attention to the most ordinary rules of hygiene, and also their disinclination to take out-door exercise in the ample limits allowed them. In a measure, no doubt, their natural fear of cold weather has had some effect in keeping them housed. Certainly the cause does not rest either in their rations or their quarters, for no difference in these respects has

been permitted to exist between them and the regular soldiers acting as their guard.

"In recording the diseases incidental to these prisoners, care has been taken not to include mild cases, such as result from indigestion, tonsillitis, pharyngitis, and common colds, where simple remedies given once or twice produced permanent cures. In a majority of the fever patients, a malarious tendency, which they had transported from the South, could be readily detected. Its pernicious influence on the liver and spleen was too evident to escape observation. The most serious case of disease of the former organ which has yet come under my notice, was that of Lieutenant ———, an officer captured at Hatteras. The patient was seized one night, after having retired, with obstinate vomiting; the material first ejected was ordinary chyle, which soon changed to bile, mingled more or less with mucus. There chanced to be in the same room an experienced physician, (also a prisoner,) who gave prompt attention to the sufferer, and in time succeeded in arresting the vomiting. The following day I saw the patient, and asked him to give me a history of his symptoms. He said 'that gradually, since his confinement, he had been growing ill, and had himself noticed that sometimes his skin was tinged yellow, but he regarded it as an ordinary case of jaundice, which he was accustomed to, and which heretofore he had removed by taking Epsom salts, but in this attack the medicine failed even to evacuate his bowels.'

"On examining the case, I found the pulse ranging between 90 and 100; its beat was regular and was not easily compressed. The tongue presented a deep-red tip and edges, while the papillæ of its middle portion were covered with a dry, thick, brownish coating. Pressure made by the hand over the right hypochondriac region revealed the fact that the lower margin of the liver protruded beyond its normal position, and at the same time this pressure caused the patient to wince. The skin was jaundiced, and to the touch it was unusually hot and dry. On inquiry, no satisfactory reply could be obtained in regard to the bowels, save the fact that they had been recently very irregular.

"In the commencement of the treatment of the case, a purgative dose of calomel, combined with pulv. jalap. comp., was given. The object of thoroughly opening the bowels having been attained, alterative doses of calomel and quinine were substituted. In addition to the above, a large blister was applied over the right side of the abdomen, and the diet was regulated. As the patient complained of great thirst, the effervescing mixture was given to allay it, and for the same purpose he was ordered to swallow occasionally small pieces of ice.

"Under this regimen and treatment the case progressed favorably for several days. Suddenly, and without any visible cause, the symptoms assumed a serious aspect, and gave reason for alarm. The pulse was greatly accelerated and of small volume, and this, together with the blanched surface and loss of strength, indicated rapid prostration. Desiring to give the patient all the medical light at my command, I called in two physicians who had seen extensive practice in the South. Although prisoners, they willingly came to the rescue, and together we proceeded to examine the case. The result of the consultation was, that we decided the disease to be bilious remittent fever, and that in every way it resembled that form of the malady which is seen in the South. It was further agreed, that though the malaria lurked in the system and might never have caused sickness at home, yet in changing climate it had been induced to make its appearance in this form of fever. The prognosis arrived at was unfavorable; still it was thought best to continue the calomel and quinine, give stimulants, and use every effort in the patient's behalf. In the course of a few hours the case passed beyond hope, as the pulse ceased at the wrist, the extremities became cold, suppression of the urine ensued, and, with unimpaired intellect, he sank and died.

"The inference, to my mind, drawn from this and other cases that have here come under my observation, is that a person in exchanging his native for another climate, may carry with him malaria which needs only an exciting cause, like a variation of temperature, to produce either fever or inflammation of some of the viscera.

"In glancing over the accompanying table of disease, it will be seen that there are recorded a considerable proportion of bronchial and pulmonary affections. The difference in this respect between the prisoners thus affected and the United States forces used as their guard, was not so marked as to draw attention. I must candidly confess that I anticipated more sickness from these affections than has yet occurred to the prisoners. It must be remembered that this island is exposed to furious gales from the ocean, and its northern latitude warrants the statement of its being extremely cold in winter, yet we see men brought from the South, confined on it, and not to a remarkable degree laboring under diseases of the chest.

"Medical writers have given the name of nostalgia to a species of melancholy to which prisoners are especially liable. In my limited experience I have found it a serious complication in slow fevers, and tending to cause cases of this kind to terminate fatally. It varies with the natural disposition of the individual, and it is modified by age. The young person, when suffering from this affection, is apt to give free vent to his feelings by weeping, and there are but few of the great human family who have not in early life felt its baneful influence. My attention was one day drawn to a boy prisoner, occupying one of the beds of the hospital, who, in addition to a slight remittent fever, was evidently undergoing great mental trouble. On inquiry, I ascertained the fact that day and night he was continually weeping, and he confessed to me he was longing

for his home. The only recourse left me was, to promise him that on recovery he would be exchanged, and, fortunately, I was enabled to carry out my obligation. The prisoners who have reached and passed puberty bear their sorrows with more manliness; yet, in many cases, disease softens their wonted courage, and the eye readily traces on their features unmistakable symptoms of melancholy.

"The following case exhibits how serious may be the results of nostalgia in middle life, viz.: a prisoner, one day, was brought to the hospital bordering on a state of collapse. He was pulseless, pale, emaciated, had cold extremities, was unable to speak, and nearly exhausted. The history of the case, as nearly as could be ascertained, was that the man had been recently captured in Virginia. He was described as being a quiet farmer at home, who had been taken from his plow and forced to serve in the ranks of the enemy. In his first engagement he was captured, and soon afterward, with others, was brought to this Fort for safe keeping. After his arrival he became melancholic, and refused to associate or even converse with his companions. By them he was neglected, and this tended to act on his mind to such a degree that finally he declined to eat sufficient food to sustain life. The man eventually became so weak from fasting that one day he fell down exhausted, and this so startled his fellow-prisoners that they concluded to bring him to the hospital. The expression the patient wore on his face, when admitted under my care, was that of intense dejection, such as is seldom seen except in asylums for the insane. On being placed in bed, brandy and carb. ammonia, together with beef-tea, were administered per rectum, as the patient had lost the power of deglutition. Under judicious treatment and nursing the functions of the body returned, so that in the course of three weeks he was able to walk about the ward by the aid of an assistant. During the slow progress of the convalescence, the patient complained of a continuous and dull pain in the forehead, which required and was relieved by a series of blisters applied to the nape of the neck. The most obstinate symptom in the treatment of the case was a persistency to constipation of the bowels; the milder cathartics were impotent, but when, at last, regular doses of croton oil were given, it was found they could be properly regulated. In this manner, with a due regard paid to building up the patient by tonics and a generous diet, he eventually regained his lost strength. On the other hand, it is to be regretted that his mind remains up to this day unbalanced, without presenting the least hope of future returning reason. Prison life affords little opportunity for agreeable recreation or associations, hence the present war must claim this man as one of its victims.

"The annexed table fairly exhibits the forms and the ratio of the diseases that prevailed in this garrison during the two months before named, but since that time nearly three hundred prisoners have been exchanged, and as the remainder have become acclimated, their chances for health have measurably increased.

"D. C. Peters,
Assistant Surgeon U. S. A."

NEWS AND MISCELLANY.

Our New Office.—Correspondents are requested to bear in mind that the office of the Reporter has been removed to a more convenient and commodious location, at the *N. E. cor. 7th and Sansom Streets.*

Medical practitioners in the city, and particularly visiting strangers, are invited to call at the office. On the tables will be found the most recent medical publications, and American and foreign exchanges, and the assistant editor is in attendance during business hours of the day. Communications, books, plates, pathological specimens, apparatus, inventions, etc., will receive due attention and acknowledgment, if delivered at the office of the journal.

Philadelphia Hospital.—The clinical class of the Philadelphia Hospital, during the present winter, has exceeded in numbers that of any previous session. Notwithstanding the distance of the hospital from the colleges, and the inclemency of the weather, there has been a regular attendance; on some occasions overcrowding the amphitheater. The extraordinary resources of the hospital for furnishing the material for clinical teaching have been well illustrated. In the medical clinic, Drs. Ludlow and Da Costa have presented an array of cases which, in number, variety, and interest, could only be produced from such an immense hospital. In the surgical clinic, surgical pathology has been abundantly exhibited, and a number of capital operations have been performed by Dr. Gross and Dr. Agnew. The renewed interest in the clinic of this hospital is satisfactory evidence of the increasing attention to clinical instruction by medical students, and of the appreciation of the opportunities which, by the munificence of the governing board, have been established.

Annual Report of the Board of Health.—This document, an abstract of which only is before us, but which we hope to see, ere long, in full, possesses some items of interest. During 1861 the bounds of the consolidated city yielded 17,271 children. Of these 162 were twins, and six were born triplets. Among the white children who were born there were 745 more males than females; while among the blacks the rule was reversed, and the females outnumbered the males by fifteen.

Sixty years ago nine-tenths of the children born in the city first saw the light within the limits now covered by the Fifth and Sixth Wards. At the present time these wards are among the least prolific of any in the built up portions of the

city, and the very large proportion of incoming young Philadelphians are born far away from the banks, warehouses, and offices which occupy the sites of the dwellings of their grandfathers.

The most prolific month in the year was January, then comes March, and next in order is February. May and June are the least prolific of the months.

During the year there were 4417 marriages.

Of the whole number named, 2608 of the brides were born in the United States, 1592 in foreign lands, and of 217 no birthplace was returned. Of the grooms, 2473 were born in the United States, 1723 in other countries, and 221 not given. The largest number of females were between the ages of 20 and 25 years, 680 females and 659 males having entered into the holy bonds. There were two marriages of individuals who had passed threescore years and ten, and some sixteen who were upwards of 60.

The deaths during the year numbered 14,468, or one in 39 of the population, according to the census of 1860.

The largest number of deaths was in the Nineteenth Ward, 1085; the smallest number in the Twenty-second Ward, 248. The ratio of deaths to population was least in the Twenty-second Ward, where it was 1 in 69 of the population; the greatest in the Seventeenth Ward, 1 in 28.

Among other things, the report states that during the past year 132 complaints were made against filthy streets, alleys, sewers, etc., which is an increase of 68 over the year previous. This has been caused by the shameful neglect of parties whose duty it is to cleanse the public highways.

The total number of complaints of nuisances was 1473.

A compulsory law for vaccination is suggested, in view of the alarming indifference to the necessity of early vaccination of children still manifesting itself among all classes of society. The proportion of 615 deaths of children in a mortality list of 758 by small-pox, is corroborative of this assertion.

Instincts of the lower order of Animals.—In the *Atlantic Monthly*, in one of his lectures on natural history, Prof. Agassiz gives the following interesting evidence of instinct in one of the very lowest classes of animals:—

"This class includes animals of various degrees of complication of structure, from those with highly-developed organizations to the lowest worms that float like long threads in the water and hardly seem to be animals. Yet even these creatures, so low in the scale of life, are not devoid of some instincts, however dim, of feeling and affection. I remember a case in point that excited my own wonder at the time, and may not be uninteresting to my readers. A gentleman from Detroit had had the kindness to send me one of those long, thread-like worms (*gordius*) found often in brooks, and called horse-hairs by the common people. When I first received it it was coiled up in a close roll at the bottom of the bottle, filled with fresh water, that contained it, and looked more like a little tangle of black sewing-silk than anything else. Wishing to unwind it, that I might examine its entire length, I placed it in a large china basin filled with water, and proceeded very gently to disentangle its coils, when I perceived that the animal had twisted itself around a bundle of its eggs, holding them fast in a close embrace. In the process of unwinding, the eggs dropped away and floated to a little distance. Having finally stretched it out to its full length—perhaps half a yard—I sat watching to see if this singular being, that looked like a long, black thread in the water, would give any signs of life. Almost immediately it moved toward the bundle of eggs, and, having reached it, began to sew itself through and through the little white mass, passing one end of its body through it and then returning to make another stitch, as it were, till the eggs were at last completely entangled again in an intricate net-work of coils. It seemed to me almost impossible that this care of offspring could be the result of any instinct of affection in a creature of so low an organization, and I again separated it from the eggs and placed them at a greater distance, when the same action was repeated. On trying the experiment a third time, the bundle of eggs had become loosened, and a few of them dropped off singly into the water. The efforts which the animal then made to recover the missing ones, winding itself round and round them, but failing to bring them into the fold with the rest, because they were too small, and evaded all efforts to secure them, when once parted from the first little compact mass, convinced me that there was a definite purpose in its attempts, and that even a being so low in the scale of animal existence has some dim consciousness of a relation to its offspring. I afterward unwound also the mass of eggs, which, when coiled up as I first saw it, made a roll of white substance about the size of a coffee-bean, and found that it consisted of a string of eggs measuring more than twelve feet in length, the eggs being held together by some gelatinous substance that cemented them and prevented them from falling apart. Cutting this string across, and placing a small section under the microscope, I counted on one surface of such a cut from seventy to seventy-five eggs; and estimating the entire number of eggs according to the number contained on such a surface, I found that there were not less than eight millions of eggs in the whole string. The fertility of these lower animals is truly amazing, and is no doubt a provision of nature against the many chances of destruction to which these germs, so delicate and often microscopically small, must be exposed. The higher we rise in the animal kingdom, the more limited do we find the number of progeny, and the care bestowed upon them by the parents is in proportion to this diminution."

State Lunatic Hospital at Northampton.—From the Sixth Annual Report of the Superintendent of this Institution, Dr. Wm. Henry Prince,

to the Board of Trustees, we learn that "at the close of the last year, there were in the hospital 315 patients, of whom 137 were males, and 178 were females. Since then 122 have been admitted, of whom 70 are males, and 52 are females. Seventy-five patients have been discharged during the year, of whom 43 are males, and 32 are females. Thirty have died; of these, 15 were males, and 15 were females. There are now, therefore, remaining under treatment, 332: 149 of these are males, and 183 are females. The whole number under treatment during the year is 437. We have now in the hospital 17 patients more than at the beginning of the year, and during this year the benefits of the institution have been extended to 37 persons more than in the year preceding."

English Surgeons.—M. Velpeau says "that surgeons in England have less of the physician in them than French surgeons; they are less accustomed than French surgeons to study the natural progress of diseases—trust less to the efforts of nature. Hence they are more full of action, and more adventurous in their proceedings, being always armed with the knife, which is with them the *ultima ratio* of art. In France, on the contrary, there has been no distinction between physician and surgeon for the last sixty years; both undergo the same examination, and obtain the same degree. But this is not so in England; there the surgeon is not a physician. Hence the boldness of English surgeons; and hence the adoption by them of operations which cannot be naturalized in France."—*Dublin Medical Press.*

Société Universelle d'Ophthalmologie.—We learn that Drs. Hays, Littel, and Joseph Pancoast, of this city, and Drs. Valentine Mott and Julius Hornberger, of New York, have been constituted the committee of the above society for these cities.

American Journal of Ophthalmology.—A new journal is soon to make its appearance at New York, with the above title, under the editorial management of Julius Homberger, M.D., pupil of Dr. Graefe, and late assistant of Prof. Sichel, of Paris. It is to be devoted to ophthalmic medicine and surgery as a specialty, and to be published bi-monthly, at $2 per annum.

Professor Agassiz's Lectures.—This eminent naturalist is lecturing this winter in Brooklyn. The lectures are delivered on Sunday evenings, under the auspices of the trustees of a fund of $12,000, which was left by the late Augustus Graham, of Brooklyn, the interest of which is required to be expended in lectures "On the Power, Wisdom, and Goodness of God, as manifested in his Works." At the last lecture, which was delivered at the Academy of Music, the hall was crowded. The course is free to the public.

Training of a Gymnast.—Dr. Windship gives one of the weekly papers the following account of his habits: "In order to keep myself in good trim, physically, for instance, I have to be in the open air a certain time during the day, to inhale a given quantity of purest oxygen; or I go and set my blood in motion by lifting as near to a ton weight as I dare venture. The principle which I profess to have deduced from my experiments in testing the extent of human strength—experiments which, I believe, are new with me, for I can find none similar on record—is simply this: *the increase of strength, normally developed and exerted, is the increase of health.*

"Wine and all fermented liquors are ruled out from my bill of fare: from what experience I have had with them, I am certain that their ultimate, if not immediate effect, has generally been to diminish my strength. I have tested this fully and repeatedly. My wildest dissipation in drinking is in a bumper of fresh milk.

"It is a great error in a gymnast to give himself more exercise than is good for him, rather than neglect an opportunity of making a display. The constant endeavor of the gymnast should be to *avoid excess.* I expect within a year to lift with comparative safety a weight of *three thousand pounds;* but when I accomplish the feat for the first time, it will be on the day immediately succeeding that on which I shall lift two thousand nine hundred and ninety-eight. If, therefore, I strain myself in the maximum effort I ever intend to make, I shall do so only to that extent which it is reasonable to attribute to the influence of two poor pounds. My rule is this: strengthen your body by cautiously lifting a gradually increased weight, until you are strong enough to be well—then let well enough alone."

Dr. Windship also says that he eats animal food once a day, sleeps eight hours out of every twenty-four, and invariably sleeps with the windows of his apartment open to such an extent as to expose him to a draught of the outer air.

Eight Children at a Birth.—The statement under this head, published in a recent number of the Reporter, turns out to be a decided "sell." A letter from Dr. N. B. Tyler, who resides within twelve miles of her residence, and who has made himself acquainted with the circumstances, says that Mrs. Bradley "is a medium-sized woman; has been married about six years, and has *never had a child in her life.*" The story, he suggests, probably originated in the ill will of neighbors, and was first published in Cleveland, Ohio.

A New Cure.—A dispensing chemist has recently had presented to him a prescription for an embrocation, written by a London physician, in which the principal ingredient is: "Ex. boa constrictor, gr. iv," to be dissolved in glycerin and water. This singular compound is directed to be rubbed into the chest, three times a day, as a remedy for phthisis.—*Dublin Medical Press.*

Dr. Dewitt C. Peters, lately in charge of the hospital at Fort Warren, has been ordered to report at Fort Pickens. He was taken prisoner by the Confederates at the surrender of the U. S. forces under Gen. Twiggs in Texas, a year or more ago, released upon his parole, and now exchanged. He is in the regular service as surgeon.

Death of Surgeon Bell.—We regret to announce the death of Brigade-Surgeon Luther V. Bell, of Massachusetts. He was acting Division-Surgeon of Hooker's Division on the Potomac, and died at the hospital, over which he was in charge, on the 12th inst. He was a man highly esteemed for his professional attainments, and stood deservedly high as a surgeon.

Chance for a "Brigade Surgeon."—We print the following as among the curiosities of the day. We find it in a New York daily: "A physician or his widow having a New York Medical Diploma, for which they have no use, can dispose of the same immediately, by addressing Cash."

Military Hospital.—At Mound City, six miles up the Ohio River from Cairo, is the largest military hospital in the United States, largest in capacity by four hundred, when completed. Its capacity is, in a few days, to be one thousand patients. The hospital is, in most respects, a model. Occupying a block of large brick stores, three stories high, the dividing walls of which are pierced for doors, with spacious kitchen, laundry, wash-room, etc. below, and extensive enough to allow the distribution of patients, sick with the same disease, into separate wards, viz.: the measles ward, the erysipelas ward, the wards for the wounded, the convalescent, etc., it exhibits a degree of system deserving of great praise. It is under the care of Brigade Surgeon E. C. Franklin, and Assistant Surgeons Dunning and Thompson. The Sisters of Charity have charge of the Dietetic and Linen Departments, and one is appointed to the care of each ward.

Books and Pamphlets received.—Guthrie's Surgery of War; from J. B. Lippincott & Co., publishers, Philada. Border Lines of Knowledge, by O. W. Holmes, M.D.; from Ticknor & Fields, publishers, Boston. Mistakes of Educated Men; from J. S. Carrigue, publisher, Philadelphia. Health: Five Lay Sermons to the Working People, by John Brown, M.D.; Carter & Brothers, New York. The Pyrophosphate of Iron, by Dr. E. N. Chapman, of New York; from the author.

Amputation of the Cervix Uteri.—This little pamphlet gives the favorable results of amputation of the cervix uteri in the several cases which have occurred in the author's practice, Dr. J. Marion Sims, of New York. The operation was first performed by Lisfranc, for what he termed incipient carcinoma, but which later investigations have demonstrated to be chronic inflammation, with induration and hypertrophy. Dr. Sims claims to have given the operation a wider range of application to disease of that organ, and made it simpler and safer. The cases related give strong presumptive evidence in its favor.

Jefferson Medical College.—The catalogue of this institution for the session of 1861–62 exhibits the names of 238 matriculants, the largest proportion of which are from the State of Pennsylvania.

Dr. D. B. Cliffe, of Franklin, Tenn., Brigade-Surgeon to Gen Zollicoffer's army, is among the prisoners taken by the Federal forces at the battle of Somerset, Kentucky. He claims to be a Union man, and has never taken the oath of allegiance to the Southern Confederacy. He was discharged on his parole of honor.

The committee on public health in New York City have decided to provide special conveyances to the hospitals for parties afflicted with infectious diseases, thus avoiding danger to the public health from the practice of conveying them in public hacks.

The *Times* utters congratulations upon the fact that the process of street-cleaning in New York has actually commenced, and hopes it may continue. We would be pleased to announce the same fact in this city. But political discussions and salt controversies will not accomplish the object, else our streets long ere this would have been as clean as they are now filthy.

We regret to learn that our friend Dr. H. G. Cox, the widely-known Professor in the New York Medical College, lately met with a severe accident by slipping upon the side-walk, dislocating his left ankle and fracturing the fibula. He was returning from a visit to one of his patients.

Poor-house indicted.—The Grand Jury of Hudson County, N. J., have published their presentment against the public poor-house of that county. They say:

"The state of the poor-house has been shown to be dirty and filthy in the extreme. Numbers of the paupers were huddled together indiscriminately in the same room—both sexes, and white and colored.

"Three children of the tender ages of three, five, and eight years, were sent to the poor-house during the last summer, and remained there for nine weeks without a change of clothing, and when reclaimed by their parents, were incrusted with scabs and covered with lice.

"Some of the paupers were not furnished with a change of garments more than once a year, and wore their clothes until they dropped off. At one time last summer, one old pail was the only convenience used there for drawing and carrying water. The fences were down, the buildings dilapidated, and the condition of the men melancholy in the extreme."

New Military Hospital at Hilton Head, S. C.—The correspondent of the *New York World* gives the following gratifying information respecting the provision which is making for our numerous sick soldiers at Port Royal: "The Hospital building approaches completion. The order to get the material was taken to New York by the Atlantic on her last trip, and during the time that she remained in port every plank, beam, and joist, to be used in its construction, was prepared, and fitted together. A salubrious site has been chosen, and in a week or two our sick soldiers will be provided with proper accommodations.

The building will form a hollow square of 325 feet in length from angle to angle. The main floor will be elevated three feet above the ground, and the height of the ceiling will be fifteen feet. Spacious corridors will be attached to the main building, for the purpose of affording exercise and recreation to the convalescing patients. It is intended to accommodate 300 persons comfortably, allowing ten square feet to each person; but, in case of emergency, double that number could be provided for."

Naval Medical Appointments.—The following are the appointments recently made by the Naval Medical Board, arranged in the order of merit as determined by the Board, with the name of State from which appointed, and the medical school from which each candidate graduated:—

Robert T. Edes, Mass., Harv. Univ.; John D. Murphy, N. Y., Univ. N. Y.; Edgar Holden, N. J., Col. P. & Surg., N. Y.; R. E. Van Giesen, N. J., do.; Thos. C. Walton, N. Y., McGill Col., Montreal; Benj. H. Kidder, Mass., Long Island Med. Col.; Lewis Zinzin, N. Y., Heidelburg Univ.; G. H. E. Baumgarter, Mo., St. Louis Med. Col.; John Homans, Jr., Mass, Harv. Univ.; John H. Clark, N. H., do.; Greenville S. Slough. Pa., Jeff. Med. Col.; Saml. R. Foreman, N. J., Col. P. & Surg., N. Y.; Wm. B. Gibson, Mass., Harv. Univ.; Geo. W. Woods, Mass., Univ. Virg.; Adolph A. Hoeling, Pa., Univ. Penn.; James J. Allingham, N. Y., Col. P. & Surg., N. Y.; Charles E. Stedman. Mass., Harv. Univ.; Wm. F. Tevey, N. Y., Univ. N. Y.; C. J. S. Wells, Vt., Univ. Vt.; Charles J. Hubbard, Ohio, Harv. Univ.; Wm. K. Van Keypair, N. J., Univ. N. Y.; Joseph Hugg, N. J., Jeff. Med. Col.; F. B. A. Lewis, N. Y., Harv. Univ.; Wm. Brown Mann, N. Y., Buffalo Univ.; Saml. W. Abbott, Mass., Harv. Univ.; Luther M. Lyon, Pa., N. Y. Med. Col.; Wm. S. Fort, N. J., Univ. Penn.; Charles H. Giberson, Vt., Univ. Vt.; Charles H. Perry, R. I., Univ. Penn.; Thomas Hiland, N. H., Dartmouth Med. Col.; Daniel M. Skinner, N. J., Univ. N. Y.; D. K. Bannon, Pa., Univ. Penn.; David T. Ricketts, Md., Univ. Md.; Thos. L. Patrick, Md., Univ. Md.; Joseph A. Babier, Mass., Harv. Univ.; Saml N. Brayton, Mass., Col. P. & Surg., N. Y.; Edw. C. Vermeulen, N. J., do.; Wm. T. Plant, N. Y., Univ. Mich.; Wm. Chalmers, N. Y., Col. P. & Surg., N. Y.; Charles H. White, Mass., Harv. Univ.; George T. Shipley, Mass., do.; Isaac H. Hazelton, N. H., do.; James H. Mears, Pa., Univ. Penn.; Benj. F. Pierce, Me., Harv. Univ.; Newton H. Adams, N. Y., Albany Med. Col.; Edward Kursner, Md., Univ. N. Y.; Stephen H. Clarke, N. Y., do.; Charles Carter, N. Y., Col. P. & Surg., N. Y.; Thomas N. Penrose, Pa., Univ. Penn.; J. Henry Gunning, N. Y., Univ. N. Y.; Edward A. Pierson, N. J., Col. P. & Surg., N. Y.; Watson C. Hall, N. Y., Geneva Med. Col.; George R. Brush, N. Y., Col. P. & Surg., N. Y.; Heber Smith, N. Y., do.; Edward D. Payne, Pa., Jeff. Med. Col.; Edward K. Dodge, Pa., Phil. Med. Col.; Ira A. Bragg, Mass., Harv. Univ.; George D. Storme, N. Y., Buffalo Univ.; John D. Ackley, Pa., Univ. Penn. The following reported after the vacancies were filled as above; they will be appointed as vacancies occur: Edward S. Olcutt, Ky., Univ. N. Y.; John T. Luck, Iowa, Harvard University.

Rainsford Island Hospital, Boston Harbor.—From the published report of the superintendent, we learn that during the four months following June 1, 1861, when the present superintendent entered upon his duties, there were admitted into the hospital 230 patients, which, with the 158 already there, make the whole number treated 388. Discharged during the four months, 196; died, 27; remaining September 30th, 165. Of the 388 patients, 150 were born in the United States, and 238 in foreign countries. The largest number of deaths from any one disease was 8, by consumption.

The Butler Hospital for the Insane, Providence, R. I.—The last annual report of this institution shows that on the 31st of December, 1860, there were in the house 127 patients—68 males and 59 females. During the last year there were admitted 53—25 males and 28 females—making a total under treatment of 180. There were discharged during the year 45, and on the 31st of December, 1861, there remained 135. Dr. Ray, the superintendent and physician, gives very few statistical details, but his report is an unusually valuable and interesting one.

At Fortress Monroe, during the month of December, there were taken sick 2783, of whom 32 were sent to the General Hospital for treatment; 2087 were returned to duty; 25 received furlough; 74 were discharged from service; 27 died; and there remained 288 sick and 653 convalescent.

Dr. Ira. Russel, Surgeon of the Massachusetts Eleventh, has been promoted to the position of Brigade Surgeon. Dr. Russel is regarded as an excellent officer, and his promotion is highly complimentary.

Sixty-four deaths occurred at the hospitals and camps near Washington during the last week.

Dr. F. W. Kelley, the newly appointed Surgeon of the Vermont Seventh, is a graduate of the Burlington Medical College in 1860, and formerly resided in Alabama.

Charles J. S. Wells, a graduate of the same Medical College, as well as the University of Vermont, has been appointed Assistant Surgeon in the Navy.

Tents vs. *Barracks.*—It is a question which is the most healthy and comfortable for troops in camp, barracks or tents. What the experience in general may be we know not, but in the case of the two regiments now in camp in Vermont, the tents seem to be best adapted to the purpose. The 8th Regiment, camped in Brattleboro', is supplied with barracks, and the 7th, in camp at Rutland, occupies for the most part tents, which the men prefer to sleep in when the two are placed side by side, and the choice is given them. There are twice as many men in hospital at Brattleboro' as at Rutland.

Mortality of Towns in Connecticut.—The *Connecticut Courant* gives the following registration returns from several places in the State, for the year 1861: New London, births, 210—males, 94; females, 114; sex not stated, 2. Marriages, 90. In Windham, 118 births, 53 marriages, and 60 deaths. In Norwich, the number of marriages was 167; births, 407; deaths, 233. The number of births in Bristol is reported at 42; marriages, 63; deaths, 55. The deaths in Danbury were 118. Of those who died, 10 were 70 years old, 8 were 80, 7 were 90, and 3 were 100. Number of births in Bridgeport, 519; of marriages, 93; deaths, 257.

The British-American Journal commences its third volume with its usual attractive original matter and fair appearance; but, on account of the "times," reduced in size. After repeated attempts and failures to establish a medical journal in the British-American colonies, we hope that the above excellent periodical will be sustained.

The death of Surgeon F. S. Weller, of the 9th New Jersey Regiment, is a sad event. He was drowned off Cape Hatteras, while bravely endeavoring to assist some of his comrades in distress. His remains arrived in this city on the 10th inst. They were taken in charge by a special committee of the New Jersey Legislature, carried to Trenton, where they lay in state till Wednesday, and from thence to Paterson for interment. Such honors are due to those who peril their lives in the service of their country.

Dr. A. W. Woodhull, Assistant Surgeon of the Fifth, and formerly of Newark, has been appointed Surgeon of the Ninth, in the place of Surgeon Weller, deceased, and has accepted the appointment.

Edward Bradley, M.D., of New York, has been appointed Surgeon of Col. Daniel Williams' Independent Infantry Regiment, now in camp near Jersey City, N. J.

Prof. G. C. E. Weber, of Cleveland, has been appointed Surgeon-General of Ohio.

Dr. R. H. Johnson, of Cincinnati, Ohio, has received the appointment of Brigade Surgeon.

The Ohio Medical and Surgical Journal has again made its appearance after a brief suspense. It is now a bi-monthly, and is under the editorial control of the faculty of Starling Medical College.

Castleton (Vt.) *Medical College.*—The trustees of Castleton (Vt.) Medical College, in consequence of the disturbed state of the political and business interests of the country, have deemed it expedient to dispense with the usual course of spring lectures the present year.

There has been but one suspension of the lecture course previous to this, since the college was founded, (in 1838,) and for a similar reason; the State and country then suffering from the effects of the financial revulsion of 1837.

On the other hand, the Medical College of Ohio advertise an "extra regular session," to commence March 12th and continue till July. They are induced to adopt this course "by the great demand for medical men in the army."

Dr. Philip M. Senderling, of Jersey City, has been appointed, by Governor Olden, Assistant Surgeon of the 1st Regiment New Jersey Volunteers, in General Kearney's brigade, now encamped at Camp Seminary, Va.

We are pleased to notice that a bill making certain needed reforms in the Medical Department of the army, which has the sanction of the Surgeon-general and the medical staff generally, is soon to be reported by the appropriate committees of both branches of Congress.

The introduction of homœopathic surgeons, as such, and the establishment of hospitals where patients are to be treated under that system, meets with no favor from the committee before whom the subject was presented and urged.

☞Do not fail to read the Publishers' notices on the cover.

MARRIED.

Holden—Hedden.—At the residence of the bride's father, on the 5th inst., by the Rev. John Crowell, Dr. Edgar Holden, U.S.N., of Roseville, to Kate, daughter of Jotham Hedden, Esq., of East Orange.

Linton—Kline.—At Frankford, on the 7th inst., by Rev. Wm. M. Combs, Herman B. Linton, M.D., of Philadelphia, Assistant-Surgeon 71st Regt., P. V., to Miss Eliza Kline, of Jenkinstown, Montgomery County, Pa.

Montgomery—Brough.—On Thursday, the 6th of February, by the Rev. S. J. Niccols, John Montgomery, M.D., of Chambersburg, Franklin Co., Pa., to Miss Kate A., youngest daughter of P. Brough, Esq., of the same place.

Richardson—Ranney.—In West Brattleboro', Vt., January 15th, by Rev. D. H. Ranney, Dr. J. H. Richardson, of Chesterfield, Mass., to Miss Lizzie S. Ranney, daughter of the officiating clergyman.

DIED.

Hassell.—At Bridgetown, Barbadoes, on Sunday, January 12th, at the Albion Hotel, Eben Hassell, M.D., of New York, aged 30 years.

Monson.—In New York, on Friday, Feb. 7th, David Daggett Monson, son of Alfred S. Monson, M.D., of New Haven, Conn., aged 25 years.

Vital Statistics.

Of Philadelphia, for the week ending Feb. 15, 1862.

Deaths—Males, 147; females, 139; boys, 87; girls, 77. Total, 286. Adults, 122; children, 164. Under two years of age, 105. Natives, 224; Foreign, 45. People of color, 11.

Among the causes of death, we notice—Apoplexy, 1; convulsions, 19; croup, 7; cholera infantum, 0; cholera morbus, 0; consumption, 49; diphtheria, 8; diarrhœa and dysentery, 5; dropsy of head, 5; debility, 16; scarlet fever, 14; typhus and typhoid fever, 7; inflammation of brain, 7; of bowels, 2; of lungs, 25; bronchitis, 1; congestion of brain, 5; of lungs, 1; erysipelas, 4; hooping-cough, 0; marasmus, 5; small-pox, 13.

For week ending February 16, 1861.....301
" " February 15, 1862.....286

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 1986.

Of New York, for the week ending Feb. 10, 1862.

Deaths—Males, 213; females, 212; boys, 123; girls, 136. Total, 422. Adults, 163; children, 259. Under two years of age, 162. Natives, 312; Foreign, 110; Colored, 5.

Among the causes of death, we notice—Apoplexy, 5; infantile convulsions, 40; croup, 17; diphtheria, 9; scarlet fever, 33; typhus and typhoid fevers, 10; cholera infantum, 0; cholera morbus, 0; consumption, 67; small-pox, 10; dropsy of head, 16; infantile marasmus, 22; diarrhœa and dysentery, 4; inflammation of brain, 15; of bowels, 9; of lungs, 36; bronchitis, 5; congestion of brain, 6; of lungs, 8; erysipelas, 2; hooping-cough, 4; measles, 2: 251 deaths occurred from acute disease, and 26 from violent causes.

Population of New York, by the census of 1860, 814,277. Mortality, 1 in 1929·5.

Of Boston, for the week ending Feb. 8, 1862.

Deaths—Males, 35; females, 48. Total, 83. Natives, 64; Foreign, 16.

Among the causes of death, we notice—Phthisis, 13; cholera infantum, 0; croup, 4; scarlet fever, 4; pneumonia, 7; variola, 0; dysentery, 1; typhus fever, 1; diphtheria, 2; hooping-cough, 1; convulsions, 4.

Population of Boston, 1860, 177,902. Average corrected to increased population. 88·66.

Of Providence, R. I., for January, 1862.

Deaths—Males, 37; females, 35. Total, 72. Under two years of age, 17. Natives, 52; Foreign, 20; Colored, 1.

Among the causes of death, we notice—Consumption, 11; convulsions, 1; croup, 5; debility, 1; diarrhœa, 1; diphtheria, 3; fever, 2; heart disease, 5; hooping-cough, 1; inflammation of lungs, 6; congestion of lungs, 3; scarlet fever, 1; marasmus, 1; small-pox, 1.

Dr. Snow reports three cases of unmodified small-pox, in individuals who had been unsuccessfully vaccinated; none in those who had been. The number of births in Providence during 1861 was 1725. Males, 936; females, 789.

The proportion of males in 1861 was remarkably large, viz., 118·6 males to each 100 females. In 1860, there were more females than males. The proportion for seven years, 1854 to 1860 inclusive, was 105·7 males to 100 females.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, No. 280. PHILADELPHIA, MARCH 1, 1862. New Series, Vol. VII. No. 22.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By Louis Bauer, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

Although we have never attached the same importance to mechanical means as some surgeons have done, and substituted the hand whenever practicable; yet if, from necessity, we have to resort to their use, it is obviously desirable to procure the most effective construction. Practically convinced of the imperfections of most apparatus heretofore employed in the mechanical treatment of club-foot, we have, for years, persevered in improvements, until we succeeded in constructing an apparatus which, we feel persuaded, answers all the detailed indications.

We wish, however, to be distinctly understood that we lay no claim to originality; for we have made liberal use of the pre-existing apparatus, and more especially we have adopted the pad-construction of Ross. Our merits, if there are any in the premises, resolve themselves into the practicable combination of the single advantages of others in a small compass, in which the details are most direct and effective, while the whole apparatus is no incumbrance for locomotion. In exhibiting the same, Figs. 22, 23, we will explain its construction, and render you familiar with its use.

The chief feature of our apparatus lies in the construction of the part designed for the foot, and the greatest attention should be paid to its proper fit.

For this purpose we take a moderately short piece of pasteboard, place it under the sole of the club-foot, and draw its contours by a pencil, allowing, however, some space for padding and changes in width and length of the foot, to be gained by the treatment. Next we should mark the places which correspond with the ball of the large toe, and the most prominent protrusion of the external margin of the foot, where pads are to be put in action.

Fig. 22.

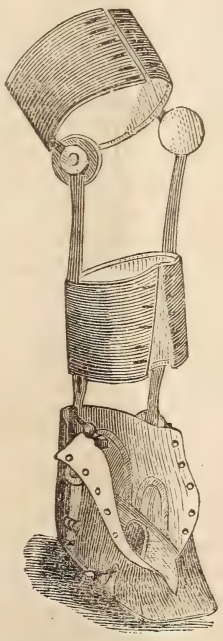
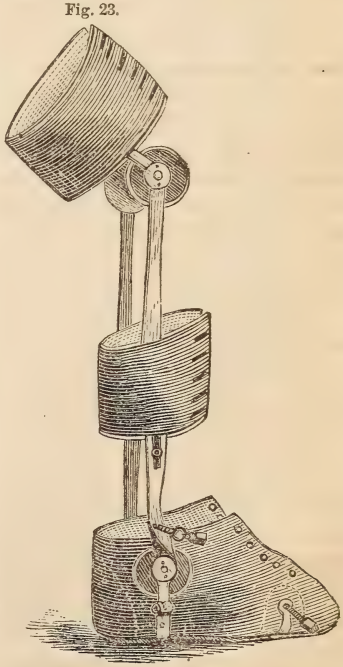


Fig. 23.



According to that pattern, the sole of the apparatus is made of stout sheet-iron, covered inside with buckskin or stout felt, and outside with

moderately thick sole leather, both fastened through the iron by copper rivets. The heel-band is arranged as in Scarpa Stromeyer's shoe —but should have two brass bottoms to fasten the double screw. At the two marked places of the sole, rectangular pieces of iron are riveted to the sole, and through the upright portion a screw passes with a well-bolstered pad at its internal end. If the foot be placed in this apparatus, we have four points of direct action. First, the double screw on the dorsum of the foot, to reduce the plantar arch. Second, the heel-band and the toe pad at one side, and the tarsal pad on the other, to reduce the horizontal infraction of the foot. By means of a key, the pad screws may be regulated, and the pressure increased and decreased at will. This arrangement keeps the foot in its place, while the most effective and steady pressure is kept up. The pressure upon the opposite and most projecting points of the foot must not be too severe, otherwise it will cause inflammation and slough of the skin, which would arrest the progress of the treatment, since the pads cannot be shifted from one place to the other. Besides a good bolstering of the pads, we have found it very protective to cover the places to be pressed in by a piece of adhesive plaster.

The entire foot-piece is joined by the iron stirrup to the leg-brace, as in the apparatus for equinus. The elastic strap which we recommended in that, to flex the foot, may be also employed in this apparatus, but it, alone, is rarely sufficient, therefore screws are to be employed at the ankle-joint to bend the foot. In fine, the leg-brace should be extended to the knee-joint and there connected with a brace for the thigh, for the purpose of controlling the actions of the knee.

If it should be found that the whole extremity inverts at the hip-joint, which is rarely the case, the apparatus should extend up to the joint and connect with a belt around the pelvis, with a view of turning the extremity in the opposite direction.

In this construction we lose the rotation of the foot as effected by Scarpa-Stromeyer's shoe, but it is impossible to combine this action with the others and likewise attain a substantial and steadily-acting apparatus. The rotatory movements must therefore be made by the hand.

3. *Talipes valgus.*

In valgus we have either complete paralysis of the entire muscles of the foot, which yields to the weight of the body, or the abductors are shortened. In the former instance the treatment is to be directed toward the paralysis according to the maxims laid down. The mechanical apparatus to be applied has to fulfill two objects—1st. To support the tibio-tarsal articulation in order to sustain the weight of the body. 2d. To raise the plantar arch. For the first indication, various suggestions have been made. A high, well-fitting, laced boot, rendered more capable of giving support by whalebone or stout leather strips vertically adjusted, is recommended; also a dextrine or plaster of Paris bandage ascending from the foot to the middle of the leg. These are very efficient supports for the time being, but are clumsy, require frequent application, and exercise a certain pressure upon the extremity, and thus are liable to increase the attenuation. We have therefore applied a brace like that in equinus, with this modification: we fasten a large and good pad inside of the ankle-joint, toward which the joint may incline without pressure. To the brace may be attached in a similar manner elastic straps, to serve as a substitute for the lost muscular action. If the extremity be shorter than its fellow, the sole and heel of the boot should be made as high as is necessary to correspond with the length of the other.

In order to raise and support the plantar arch, we advise that a little cushion, made of buck-skin and in the shape of the arch, be established inside of the boot. The best plan is to commence with one or two layers of the skin and increase the thickness as the treatment proceeds.

The active forms of valgus necessitate the division of the contracted peroneus muscle, or of the whole group of the abductors, as the case may be. This is at least indispensable in inflammation of the tibio-tarsal articulation, and should be followed up by circular pressure with adhesive strips and leather splints in front, to steady the joint and secure rest. It is almost incredible how beneficially this proceeding acts upon the affection, and it does away with all the eccentric and useless suggestions of derivation, moxa, and the actual cautery. In this simple manner we have successfully treated numerous cases of this kind, which had been the source of intense suffering for years, being naturally aggravated by each attempt at walking.

If the contraction of the peronei muscles be connected with paralysis of the tibialis muscles, the expediency of dividing the former may be

disputed on the ground that injury is being added to the already existing difficulty. The question, however, remains, how shall we mend the deformity and enable the patient to employ the member? It is already difficult to steady the articulation with mechanical appliances in paralysis of the entire motor apparatus of the foot, but it is completely impossible to do so when the malposition of the latter is maintained by retraction of the peronei muscles. We, at least, have never succeeded by any of the devised mechanical auxiliaries. Meanwhile the deformity increases and gradually compromises the bones of the tarsus. Between the two evils we have to choose, and we think that the division of the contracted muscles is the lesser. Certainly we paralyze the divided muscles for a time, but we have the chance to invigorate them again by galvanism. Moreover, we arrest the progress of the deformity, and protect the tarsal bones from becoming involved. Above all, we qualify the patient for locomotion. For these considerations we advise tenotomy as the best symptomatic remedy, and depend on time and other means to accomplish the rest.

4. *Talipes calcaneus.*

The therapeutic suggestions for the management of calcaneus we have chiefly derived from other authors, since we have had no case under our charge. Little, Brodhurst, and others coincide in the necessity of dividing the tibialis and peroneus tertius, and, if necessary, the two remaining flexors of the foot, extensor pollicis longus and digitorum communis longus. The foot should then be forcibly extended and kept in extension by splints; meanwhile, frequent passive motions should be made in the ankle-joint, and the after-treatment followed up with the boot used in equinus, with this difference, that the elastic band should be fastened to the heel and the leg-band, to act in the place of the paralyzed triceps suræ. If the elastic band should suffice to keep the foot rectangularly to the leg, the section of the flexor should of course be dispensed with.

5. *Talipes plantarus*

Requires, for its alleviation, the section of the contracted plantar muscles, including the plantar aponeurosis, an iron boot, with vertical pressure upon the dorsum of the foot by our double screw. This plan will stretch the foot and diminish the plantar arch. With this treatment we have even succeeded in a case of eighteen years standing.

6. *Abduction of the large toe*

Necessitates the division of both the tendons of flexors and extensors, and a triangular cushion between the first and second toe; in very obstinate cases, an iron-soled shoe, with pad pressure upon the protruding articulation, should be resorted to.

7. *Burns in the neighborhood of the ankle-joint*

May have caused contraction of the skin and malposition of the foot. In such a case, gradual and persistent extension in the opposite direction will most usually overcome the contraction; and, according to the case, one of the orthopædic apparatus which we have suggested for the treatment of the various kinds of talipes may be employed. The subcutaneous loosening or plastic operations are rarely required.

Since the delivery of the lectures on talipes, we have become acquainted with the peculiar views held by Prof. Pancoast, of Philadelphia, and have had personal opportunity of witnessing their practical application. Although not as yet prepared to offer an opinion as to their correctness, they certainly command our highest consideration. That distinguished surgeon is of the opinion that in talipes equinus and equino-varus, not the entire triceps is contracted, but the soleus muscle exclusively. He therefore contents himself by cutting off the insertion of that muscle from the lower and anterior portion of the gastrocnemius and the upper part of the Achillis tendon, and assured us that for the last ten years he had not divided the tendon itself. On a recent visit to Philadelphia, Prof. Pancoast had the goodness to perform the operation upon two patients for our especial benefit, and gave us the opportunity of assisting him in both cases. We were thus enabled to examine the patients before the operation, with and without anæsthetics, and also to observe the immediate effects of the division. Both cases belonged to the incipient forms of equino-varus, and were congenital. One patient was one year, and the other three years old. When we forcibly flexed the foot, we expected to render the entire triceps tense. This was, however, not the case. The belly of the gastrocnemius remained flacid, whereas the soleus was evidently hard, tense, and resisting. This condition suffered no alteration

under anæsthesia. During the operation we distinctly perceived the yielding of the malposition, and as soon as the last fibers had been divided, the foot could be flexed without great effort.

The operation was performed in a masterly manner, as follows: The limb being placed on its outer aspect and kept limber, the operator grasped the belly of the gastrocnemius and raised it off from the soleus. He then introduced a sharp-pointed tenotome through the skin and aponeurosis. In the wound was inserted Bouvier's blunt-pointed, convex tenotome, so deeply as to be felt on the other side between the gastrocnemius and soleus muscles. At this moment the soleus was rendered tense by strong flexion of the foot, and with a horizontal section, the insertion of the soleus was carefully divided. The foot was at once secured in a simple but efficacious apparatus, in which flexion was effected by a screw traversing the ankle-joint of the brace.

We were forcibly struck with the ingeniousness of the operation, but must withhold our opinion as to its general applicability. That in the above cases, the soleus was exclusively implicated in the malposition, no reasonable doubt could be entertained. We are not prepared, however, to admit or deny the opinion of Dr. Pancoast in the generality of cases, until further experience shall give us an opportunity of thoroughly testing it.

COMMUNICATIONS.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

By Geo. K. Smith, M.D.,

Demonstrator of Anatomy in the Long Island College Hospital, Brooklyn, New York.

Continued from page 419.

"Case II.—Mr. N., a corpulent man, aged fifty-one, on getting out of his chaise fell upon his left hip, and was unable to walk. I saw him on the third day after the injury and found the knee and foot everted and the limb shortened from an inch to an inch and a third. I could extend the leg to within about one-third of an inch of its natural length. When extended and rotated, it gave a distinct crepitus. I applied a long splint modified from Desault's by Dr. Hartshorne, of Philadelphia. With this I kept up permanent extension, but was never able to bring the limb to its full length. When an attempt was made to do so the patient complained of great pain in the groin. During the whole course of treatment the limb remained from a third to half an inch shorter than natural. * * * * The splint was removed in eighty-four days; the patient from that time was able to sit in a chair, but could never flex the thigh to a right angle with the body. * * * * He ultimately walked with a cane.

"He survived the injury twelve years; and eight years after his death I obtained the specimen of injured bone together with its fellow. The head is a little elongated and depressed, with a shortening of five-eighths of an inch, and much absorption of the neck. The distance of the corona of the head from the anterior inter-trochanteric line is seven-eighths of an inch, and the corona, posteriorly from the ridge, scarcely one-fourth of an inch."

The history of this case clearly shows that the neck was fractured, and the specimen shows that the fracture has been united, but that the line of union is partly without the normal capsule. The remarks on Case I. are applicable to this case, also to that of Mrs. Mason, Case III., in which the neck has suffered a similar loss by absorption. The line of union in each of these three specimens is near the posterior inter-trochanteric line, and near the base of the trochanter minor, as will be seen by reference to the illustrative engravings in Prof. Mussey's paper.

Figures 8 and 9 exhibit a pair of normal capsules having their insertion into the posterior surface of the neck, an inch and a quarter from the center of the posterior inter-trochanteric line, and their insertion into the inferior surface of the neck, one inch and a half from the center of the apex of the trochanter minor. Figure 1 shows the insertion of the capsule an inch and a half from the middle of the posterior inter-trochanteric line, and an inch and three-quarters from the center of the apex of the trochanter minor. If the neck of the bone in this specimen had been fractured during the life of the patient, and union had occurred as close to the shaft of the bone as it is in either of Prof. Mussey's cases, the line of union would have been nearly or quite an inch external to the normal capsule on the posterior and inferior surfaces of the neck.

"Case III.—Mrs. S. Mason, aged seventy-three, a small, thin woman, was rendered helpless by falling upon her right hip. Two days after the accident I was called to see her in consultation with my friend Dr. William Judkins, who was in attendance. The knee and foot were a little everted, with slight shortening and tender-

ness on pressure in the groin and behind the trochanter major. She was averse to the application of any kind of splint, and, being in a delicate state of health, we allowed her to remain upon her couch, with the thigh and leg somewhat flexed and supported by a pillow. She remained in this situation about three months, after which she could move, with the aid of crutches, in a manner not very satisfactory to herself. She died in a year and a half after the accident, worn out by age and exhaustion.

"A considerable ridge runs across the anterior part of the neck, with a depression or irregular superficial groove between it and the head. The head of the bone is three-eighths of an inch below its natural level. The distance anterior from the corona of the head to the inter-trochanteric line is seven-eighths of an inch; posteriorly, half an inch. The interior of the bone shows a narrow, white, and eburnated line corresponding with the aforesaid ridge, exhibiting a firm consolidation; the neck somewhat shortened."

While we entertain the highest respect for the opinions of Prof. Mussey, we do not find recorded in the history of this case conclusive proof that the neck of the bone was ever fractured; if, however, the diagnosis of fracture was correct, so much of the neck has been absorbed that the line of union is external to the normal capsule on the posterior surface of the neck, and it is impossible to tell whether the fracture was entirely within or partly without the capsule.

"Case IV.—Mr. F., aged eighty-two, a hardy yeoman, who had spent most of his life in Kentucky, fell upon his hip upon a slippery sidewalk. He was helpless, and complained of great pain under any attempt at motion of the hip-joint. The limb was shortened, but to what extent could not then be ascertained, as he was unwilling to submit to so much manipulation. It was judged best by Dr. Fore and myself to leave him without dressings. After three months lying upon his bed he could move upon crutches. In the course of a year he occasionally got about with a staff. He died in two years from the time of the injury.

"The *post-mortem* examination showed the bone with an intra-capsular fracture; the osseous portion of the neck wholly gone, and the entire of the osseous surfaces of the two fragments occupied by strong fibrous bands of one-third of an inch in length. The head, when pressed downward, just rested upon the trochanter minor, causing a shortening of one inch and an eighth. The strength of this fibrous production was amply sufficient to sustain the weight of the body."

Professor Mussey states that "the *post-mortem* examination showed the bone with an intra-capsular fracture." We cannot see how he arrives at positive knowledge of this fact after "the osseous portion of the neck is wholly gone." He seems to have been misled by the appearance of the morbid capsule, in the same manner that Robert W. Smith was in Cases X., XI., XVIII., XX., XXIII., and XXV. (See *Smith on Fractures.*)

"Case V.—Fig. 10 exhibits a posterior view of an intra-capsular fracture of the neck of the os femoris. The specimen is without history. It is interesting on account of the ligamentous connection of the fragments which, from appearances at the time it was obtained, must have been sufficient for the ordinary purposes of locomotion. The bony portion of the neck absorbed." (See remarks on Case IV.)

"Case VI.—Fig. 11, without history, shows a fracture at the neck which corresponds with the anterior inter-trochanteric line. The shaft is rotated very considerably outward. It is interesting from the evidence it affords that the fragments were never entirely separated from each other. The head, unchanged in form, is depressed three-eighths of an inch below its proper level; its corona, from the anterior inter-trochanteric line, one and three-eighths of an inch; posterior ditto, three-eighths of an inch; the neck in front not shortened. Fig. 12 shows the line of osseous consolidation of this fracture." "The line of consolidation, as marked on Fig. 12, is wholly intra-capsular—the fragments having been kept *in situ* after the injury, perhaps by the cervical ligament, or the mutual crushing into each other of the fractured surfaces, or both."

If the line of fracture "corresponds with the anterior inter-trochanteric line," it cannot be said to be entirely within the capsule, for it is only the external fibers of the capsule which have their insertion into the anterior inter-trochanteric line, the deeper fibers of the capsule being inserted into the neck of the bone within this line. The synovial membrane lining the capsule usually approaches very close to the upper part of the anterior inter-trochanteric line, but diverges from this line as we pass downward, so that at a point midway between the trochanters it is generally half an inch distant from the line. (See Fig. 1.)

The line of union in this specimen, as shown in Fig. 12 of Prof. Mussey's paper, is plainly without the capsule, since it is close to the shaft of the bone.

"Case VII.—Without history. Head depressed; shortening nearly the fourth of an inch; an irregular depression or wide groove in the upper and anterior part of the neck. The corona of the head from the anterior, one and a half inch; posterior, one-fourth of an inch." (See remarks on Case I.)

Alden March, Professor of Surgery in the Albany Medical College, has two specimens

which he regards as examples of bony union of intra-capsular fracture of the neck of the femur. It is with pleasure that I refer the reader to Prof. March's report of these cases, which is accompanied with accurate engravings of the specimens, and may be seen in a paper entitled "Osseous Union of Intra-Capsular Fracture of the Neck of the Femur," published in the Transactions of the Medical Society of the State of New York, for the year 1858, from which I quote the following:—

"Of the two specimens here presented for examination as examples of intra-capsular fracture of the femur united by bone, the smaller one, numbered 884, was procured in London some years since, and at that time was regarded by the curator of the old London Hospital Museum as a good specimen of fracture and bony union of the neck of the femur within the capsular ligament. I can give no history of the patient, or subject, from whom it was taken. I think it could not have belonged to an old person; and it is quite clear that he or she, as the case may be, lived long enough after the occurrence of the fracture for it to become thoroughly reunited by bony material.

"The neck of the bone is very much absorbed, which will be found to be the case in almost all instances of intra-capsular fracture, whether united by bony or ligamentous material. This specimen, with several others of various kinds of organic change, was submitted to the examination of an able professor of surgery, who has recently devoted much attention to the study of fractures, and who remarks upon it as follows: 'Specimen 884 is plainly enough a *fracture*, and I think there can be no doubt that on one side of the neck the fracture was within the capsule; but I have no means of determining whether it was also within the capsule on the opposite side, since the neck is almost completely absorbed.'

"On close examination, it will be found that about all the part of the bone that can be called *neck* is connected with the shaft, and that the fracture appears to be nearly transverse and close to the *articulating* or cartilaginous border of the head. It strikes me that it is just as clearly *altogether within* the capsule as it is a fracture."

Some weeks since, I addressed a note to Prof. March, requesting measurements of one of his specimens, to which he very kindly replied by sending both his specimens that I might examine them at my leisure.

The appearances of specimen 884 seem to have misled each of the distinguished surgeons whose descriptions of the specimen are given above. Moreover, my first impressions concerning the specimen exactly coincided with the opinion of Prof. Hamilton, who thought that the posterior surface of the neck was "almost completely absorbed." A more careful examination of the specimen, some days after, revealed the fact that nearly or quite one-half of the length of the neck, even of its posterior surface, still remains attached to the shaft of the bone, and that the other half of the neck, which probably was attached to the head of the bone after the fracture, was entirely removed by absorption before union occurred. After removal of the acetabular fragment of the neck, the limb was rotated outward and drawn upward and forward in such a manner that the posterior surface of the femoral fragment of the neck rested against the head of the bone which still remained in its socket, the inferior edge of the head being close to the base of the trochanter minor, and its posterior edge close to the posterior inter-trochanteric line, while the anterior edge of the head extended a little beyond the fractured extremity of the remaining portion of the neck. The capsular ligament must still have retained its normal insertion when union occurred, since enough of the neck remains to warrant such a conclusion, and but little doubt can be entertained that the union, such as it is, occurred entirely within the normal capsule. The insertion of the capsular ligament into the posterior surface of the neck must have been close to the fractured extremity of the femoral fragment, and, as this fragment was drawn forward, the limb being rotated outward, the posterior surface of the capsule was folded backward toward the shaft of the bone, thus intervening between the head of the bone and the posterior surface of the neck, and preventing union of the fragments at this point. A portion of the dried capsule still remains occupying this position; and, if the specimen be held between the eye and a bright light, it is plainly seen that the posterior surface of the neck is not united to the head of the bone. The union is by no means extensive, and exists only between the posterior surface of the fractured extremity of the femoral fragment and that portion of the head with which it is in immediate contact. Prof. March asserts that "it is quite clear that he or she, as the case may be, lived long enough after the occurrence of the fracture for it to become thoroughly reunited by bony material." Concerning this statement there exists, in my mind, a little doubt, for I *know* that some of the bond of union is composed of ligamentous material; yet I cannot state that it is all of this character. Maceration will prove the merits of the specimen. I have

called the attention of Prof. Hamilton to the fact that much more of the neck still remains attached to the shaft of the bone, in specimen 884, than he thought at the time the specimens were submitted to his examination by Prof. March; also, that the fracture and its subsequent union were probably entirely within the normal capsule. After a careful examination of the specimen, Prof. Hamilton requested me to state that he now "regards the specimen as one of great interest," although he "cannot consider it a positive proof of bony union until it has been subjected to the test of maceration."

The following is the description of Professor March's second specimen, together with the evidence cited to prove that the neck of the bone has been fractured:—

"The large bi-section of a more recent specimen was procured about three years since, the description and history of which is as follows: The subject from whom the specimen was taken was a large-framed man, about fifty-eight years of age at the time of his death. I think I must have known the person twenty-five or thirty years. His gait was peculiar—a kind of side waddle—one limb appearing to be two or three inches shorter than the other, and the hip of the shortened side greatly projecting laterally.

"When the two sections are replaced, and on looking at the head of the bone, it will be observed that a pretty large surface at its upper part, and toward the trochanter major, is a little flattened, and has the appearance of having been worn away, deprived of cartilage, and becoming ebonated, or presenting at one point a *porcelaneous polish*. This change I regard as the result of *interstitial* and *progressive* absorption, aided by *attrition*, as having occurred at an advanced period of life.

"The ridge of bone on the anterior and superior part of the neck, where I suppose the fracture existed, is still covered with a portion of the dried capsular ligament. At the back and inner part of the head there is a portion of cartilage to be seen, of a brown color, and thinner than natural. That part of the head occupied by the ligamentum teres seems to have been getting into a state of ulceration, but how long before death I cannot conjecture. Most of the cartilage of the head of the femur, on the other side, is absorbed, and its surface more or less polished. In the specimen of this, in the right side of the same patient, there appears to have been a fracture in the shaft, about two or three inches below the trochanter minor, which was united without much distortion.

"If we continue the examination of the bisected specimen—that of the left limb—after replacing the sections, it will readily be observed that the *head* of the bone has been *depressed* and *turned obliquely* backward—in these respects occupying almost precisely the position in which we find the head of the bone situated in specimens where no doubt can be entertained as to the existence of fracture through the neck, as two or three of the accompanying specimens will prove.

"The distortion of the head, or altered relation between it and the shaft of the bone, is due to the action of the muscles that carry the shaft, and the portion of the neck attached to it, upward; and to those that evert it, or roll it outward.

"The long spine or rib of bone extending upward and inward, was found imbedded in the tendons of the psoas and iliacus muscles; and seems to have its attachment at its base, to the point where we should look for a trochanter minor.

"In comparing the inner face of the sawed specimen with Mr. Jones' case, a wood-cut of which is given in R. W. Smith's work on Fractures, at page 63, we shall see that the appearances are almost identical.

"Thus much for the ocular demonstrative proof of the existence of a former fracture; and after giving the historical facts connected with the accident, at the time the fracture was produced, we shall then undertake to demonstrate that it was *complete*, and altogether *intra-capsular*. If we succeed in establishing these two points, the third, that of *bony union*, we conceive to be self-evident.

"Fred. L., the subject of our morbid specimen, according to the alms-house record, died May 18th, 1854, aged sixty; although it is believed that he was not as old by some two or three years.

"I instituted inquiries of a great number of our old citizens as to the *cause* of 'Fred.'s' lameness, and the time of its occurrence. I shall select only a few from the large catalogue, those that appear to be the most definite and to the point.

"A. C., aged seventy, a colored woman, born and had always lived in Albany, knew Fred. and his mother well when she (the witness) was young, and then a slave. When he, the said 'Fred.,' was a mere lad, she knew him to be lame, and about as much of a cripple as at the time of his death; also that he (Fred.) had informed her that a shed fell upon him, or that he fell from a shed, and injured him severely in the hip, and that was the cause of his lameness.

"W. H., a very reputable colored man, over seventy years of age, had known 'Fred.' many years; and from his earliest acquaintance knew him to be a distorted cripple.

"Mrs. S., the wife of a late distinguished citizen and stateman, now eighty-three years of age, says, she knew Fred. from childhood until near the time of his death. She very well remembers when he broke his hip or upper part of the thigh-bone; and thinks that he could not have been more than ten or twelve years of age at the time, as she was in the habit of seeing the nurse, or woman who took care of him, carry him up and down stairs on her shoulders during his confinement with the injury; and, also, immediately

after getting about; that he was just about as lame, as much of a cripple, and as much distorted in his figure as he was at any time previous to his death.

"Mrs. L. H., eighty-three years of age, now, and at the time of Fred.'s birth, a resident of Albany, says, she was intimately acquainted with the family in which Fred. was raised; remembers well the time when Fred. broke his thigh; knew the physician who attended him; and thinks he could not have been more than twelve or fourteen years of age at that time. She also knew that he was from that time, and ever after, lame; one limb being much shorter than the other; and that he continued to be a cripple as long as he lived.

"But the testimony of the following two witnesses is as clear, as to *time* and *place*, as incontestible proof can possibly establish any given fact.

"Mr. G. D., now about fifty-seven years of age, and one of our most respectable citizens, was with Fred. at the time he fell from the shed, or the shed fell upon him, and very distinctly remembers the time and place of the accident; knew of his having been attended by a physician for a broken thigh; and, also, has known him ever since to have been a great cripple, with the left limb much shorter than the right.

"J. D., Esq., the senior of the above eye-witness to the accident, saw Fred. the next day after he was injured, and knew that Dr. James Low, a talented and well-educated surgeon, attended him for a fracture of the thigh.

"Now, when we come to consider the history of the case, and compare the left *morbid* with the right normal specimen, and observe how strangely and strongly-marked the contrast is, in relation to the *head*, *neck*, *trochanters*, and *shaft* of the two bones, it seems to us that the proof of the existence of fracture at an early period of life is absolutely conclusive.

"The proof of its being *complete fracture* and not *impacted*, is to be found in the *great shortening* of the limb, and in the *angular* and *rotary distortion*.

"The evidence of the fracture being *intra-capsular* is to be found in the existence of the original attachment of the capsular ligament, anteriorly and posteriorly, in a dried state, and may be easily examined by any one who may see fit to do so.

"The American professor of surgery, to whom reference has been made, and to whom I presented the specimen for examination, together with a detailed description of it, as well as a partial history of the occurrence of the accident, which resulted in the fracture of the neck of the femur, as I allege, at an early period of life, disposes of the whole matter in the following laconic language: 'I must concur with Dr. A., in believing that specimen No. 1 is simply an example of chronic rheumatic arthritis, or interstitial absorption.'"

The history of this case does not seem to afford conclusive proof that the neck of the bone was ever fractured, and the appearances of the specimen are quite as unsatisfactory. If the neck of the bone were ever broken, it is impossible to tell the point at which the fracture occurred, since nearly all of the neck has been removed by absorption. The sections of the specimen exhibit nothing which can be regarded as the line of union of the fragments, the cancellated structure of the head, neck, and upper part of the shaft being almost entirely replaced by solid bone.

Professor March states that—

"The evidence of the fracture being *intra-capsular* is to be found in the existence of the original attachment of the capsular ligament, anteriorly and posteriorly, in a dried state, and may be easily examined by any one who may see fit to do so."

We have already shown that the removal of the neck, by absorption, is accompanied by a removal of the insertion of the normal capsule—a fact which is well illustrated by the insertion of the morbid capsule of this specimen. The neck has been so completely removed by absorption, that the greater part of the trochanter minor is lost in its connection with the head of the bone. A portion of the conjoined tendon of the psoas magnus and iliacus internus muscles still remains, and exhibits, by its insertion, the position of the trochanter minor. The capsular ligament is inserted so far remote from its origin that it includes nearly or quite all of the trochanter minor, and is so closely blended with the conjoined tendon of the psoas and iliacus muscles that this tendon seems to form a part of the morbid capsule. The insertion of the capsular ligament of this specimen cannot be regarded as its "original attachment," and so little of the neck still remains that, if the supposed line of union be located at any point between the head and the shaft of the bone, it will be in a great degree external to the normal capsule, and consequently extra-capsular, even though it is included by the morbid capsule of the specimen.

At a meeting of the New York State Medical Society for the year 1860, Daniel Holmes, M.D., of Canton, Bradford County, Pennsylvania, exhibited a specimen as an illustration of bony union of intra-capsular fracture of the neck of the femur. The following is extracted from the report of the case published in the Transactions of the Society, page 80:—

"In the evening of July 19th, 1859, I was called in haste to see Mrs. C. W., who had just

received an injury by falling on the floor; and as her residence was near at hand, I reached it in a short time. I found her lying on the bed with both limbs extended. She complained of pain in the left groin and down the limb, which was aggravated by motion and by pressure on the trochanter.

"I learned that as she was about to retire, she extinguished her light; but wishing to sit down a moment, she placed her right hand on the left arm of her chair, supposing it to be the right arm, thus missing the chair she came to the floor with her whole weight on the left hip. The left lower limb being wholly disabled by the fall, she was taken up and laid upon the bed. The limb was measured and found to be one-half of an inch shorter than the other.

"The toes were everted, and by placing one of my hands on the trochanter, and grasping the limb, and by rotating it with the other, I discovered a distinct crepitus. I then gave a positive diagnosis of fracture of the neck of the femur, and probably within the capsule.

"About the middle of the eleventh week, just as we were about to make the experiment of having her sit up, and to try the strength of the limb, a large carbuncle made its appearance on the upper part of the sacral and lower lumbar region. A large slough soon came out, extending in depth to the ligaments of the sacrum. In spite of all restorative means, the powers of life soon began to falter, and she expired on the 17th of October, fourteen weeks and three days from the time the injury was received.

"A post-mortem examination, on the 18th, proved the correctness of the diagnosis. It revealed a fracture of the neck of the femur, wholly within the capsule, which was restored by bony union, and sufficiently strong to almost support the weight of the body. The coaptation of the extremities of the fracture was nearly perfect, and had the patient survived to have used the limb, its length would have been nearly perfect."

Dr. Holmes not only exhibited this specimen at the New York State Medical Society, but also presented it at the meeting of the American Medical Association at New Haven, in the summer of 1860, and again before the Southern Central Medical Association, in Binghamton, Broome County, New York. In each of these societies he was met with the objection that the fragments might possibly be united by ligamentous, instead of bony material, and was urged to prove his statements by macerating or boiling the fractured bone. This he neglected to do. About three months since I addressed a note to Dr. Holmes, informing him that I was preparing a paper on the subject of intra-capsular fracture of the neck of the femur, and requesting definite measurements of his specimen, showing the distance of the line of union from the inter-trochanteric lines. I also inquired if the specimen had ever been macerated or boiled, to prove that the bond of union was bony instead of ligamentous, and requested that, if it had not been submitted to such a test, he would boil it for some hours, and inform me of the result. This note remains unanswered.

However reluctant Dr. Holmes may be to subject the bone to such a test of the truth of his opinion, it is to be regretted that he has not, at least, given such measurements of the specimen as will assign a definite location to the line of union. He states that the post-mortem examination "revealed a fracture of the neck of the femur, wholly within the capsule." This may be very true, and yet the line of union may be without the normal capsule; for the capsule of the morbid specimen is found to include the line of union, when the head is united to the shaft of the bone, after removal of the entire neck by absorption. The simple fact that Dr. Holmes did not comply with the request made at each of the three societies mentioned, would seem to imply an unwillingness on his part to subject the specimen to this important test, and, to one unacquainted with him, it might suggest the existence of a doubt in the mind of Dr. H. that the fragments were united by bone.

No surgeon can be more anxious than I am to establish the fact that bony union of intra-capsular fracture does occasionally occur; yet I am quite unwilling to admit, as positive proof of this desirable result, any specimen which has not been submitted to long-continued maceration or boiling, to test the solidity of its union.*

The insertion of the capsule, in specimen 25, was seven-eighths of an inch distant from the

* After completing my paper, I received a reply to my note to Dr. Holmes, which, he said, had been delayed by his illness, absence from home, etc. The following are the measurements of the neck of the fractured bone, showing the length of the neck, also the distances from the inter-trochanteric lines to the line of union, measuring from the points indicated on Figs. 3 and 4:—

Length of the Neck.

Anterior . . . . . 1¾—2½.
Posterior . . . . . ⅞—⅞—15-16.

Length of Neck of Sound Bone.

Anterior . . . . . 1½—2.
Posterior . . . . . 1½—1¾—1⅝.

Distance from Inter-trochanteric Lines to Line of Fracture.

Anterior . . . . . 1½—1.
Posterior . . . . . ¾—⅞—¾

A comp rison of the length of the neck of the fractured bone with that of the sound femur of the same subject, shows that about half of the length of the posterior and inferior surfaces of the neck was removed by absorption before union occurred, and it is almost certain that the insertion of the capsule was removed by this absorption; for the line of union, although included by the capsule of the specimen, is distant from the center of the apex of the trochanter minor only three-fourths of an inch, and I have yet to see a specimen of the normal capsule which would entirely include it.

center of the apex of the trochanter minor, and that is the only one I have seen in which this distance was less than an inch. In specimens 5, 6, 7, and 8, the distance from the center of the apex of the trochanter minor to the insertion of the capsule was one inch and a half, and in specimens 1 and 27 this distance was one inch and three-fourths. (See Table.) Dr. Holmes states that

"The bone has been boiled and sufficiently tested to satisfy all those who have examined it, of the bony union. The specimen has been examined by many of the best surgeons in the country, who were all abundantly satisfied, viz., Drs. March, Gross, Pancoast, Norris, and A. B. Mott. The capsular ligament is entire on the bone."

If the fragments of a fractured bone be united by fibrous material, long-continued maceration or boiling of the bone will destroy the fibrous union and separate the fragments. The ligaments attached to the bone, and the periosteum covering it, will also be removed by the process; hence, since the "capsular ligament is entire on the bone," we are forced to conclude that the specimen has not been boiled a sufficient length of time to prove that the fragments were united by bony material.

To be continued.

Diphtheria—Laryngotomy—Recovery.

By John W. Lodge, M.D.,
Lower Merion, Pa.

Among the most potent diseases that have originated with, or been engrafted upon the people of this country, is diphtheria; and the excitement and dread which attended its first appearance here still continues to an alarming extent. Sore throats, which, only a few years ago, were considered of trifling moment and rarely produced any anxiety, now bring with them fearful premonitions, and fill with terror the minds of all concerned. When a case of ordinary simple angina occurs, producing in the patient a little tumefaction of the throat and difficulty of deglutition, the friends all remember several cases in the immediate neighborhood who were similarly attacked and suddenly died of a painful and malignant disease.

There probably has been no disease of modern times which so rapidly won for itself a name so feared and dreaded; for, although its appearance here is comparatively recent, the word, Diphtheria, has a portentous and deadly import. To render it more fearful still, it appears under the garb of an old but easily overcome malady, which, suddenly divesting itself of all familiarity, soon carries its victim to the grave. Unlike other pestilences it spares the aged and decrepit, but unrelentingly grasps the very heart and bud of families; not the puny and delicate only, but the strong, healthy, and robust—those least liable to the ravages of more merciful maladies.

To Bretonneau belongs the credit of having been the first to give us a clear idea of the nature of the disease and to dispel much of the confusion which enveloped it. In our own country zealous investigators have given us much information; among others, Bard, Geddings, Slade, and Clark are pre-eminent, and we have much reason to hope that they have cleared the way for more extended researches in the future; much, however, remains to be done before we will have sufficient data upon which to found a scientific and successful plan of treatment. To enter upon a discussion of the history, pathology, complications, and treatment of this disease, would be an irksome task, and not within the scope of this paper, which is merely intended to present a single case; but, obscure and doubtful as it is, it is not altogether devoid of attractions; that this is the case we have merely to look at the recent medical journals, filled, as they are, with accounts of cases and discussions, occasionally unique, of the causes, symptoms, etc. of diphtheria.

It must be admitted, that while all the different modes of treatment have their able and tenacious supporters, the *result* is generally the same—death; and, whether we regard it as a local affection or a real hæmatic disease, we derive but little advantage from adapting our remedies to our opinion. It is the object of this short paper to describe a case which will illustrate the advantage of occasionally resorting to an operation, however doubtful statistics may demonstrate its general success to be; I refer to laryngotomy.

Case.—M. H., a little girl, aged two years, had been unwell for several days; her mother informed me that she had gradually lost her appetite, her bowels irregular, with some fever and restlessness toward night; previously she had been quite healthy, not having been affected with any serious disease during her life. At the time of my visit these symptoms had become much aggravated and others of a more serious character had supervened, presenting all the phenomena of a well-marked case of diphtheria. There was considerable tumefaction and redness about the

throat, extending to the tonsils and arches of the palate, here and there covered with small patches of false membrane, which, being pulpaceous in its character, could easily be broken down with the end of the spoon. When removed, it could be, with ease, separated into shreds, thus demonstrating its membranous structure. When this exudation was removed, a drop or two of blood would ooze out from the soft, friable mucous membrane beneath. The false membrane was not confined to the back part of the fauces, but had commenced to invade the posterior nares, producing in the patient a peculiar snoring when attempting to breathe through the nose. The general symptoms were not so well marked, or in proportion to the severity of the local disease. The countenance was somewhat palid, the pulse indicating a little feebleness and irregularity of the heart's action; the tongue covered with a yellowish fur; the bowels constipated; the respiration difficult, yet not much altered in frequency or rhythm. Being assured that the case was serious, and in view of the great mortality of the affection, I told the parents the child would, in all probability, die.

It was determined to adopt the usual combination of stimulants and antiseptics, with a "hope, against hope" of being able successfully to combat by these means the debilitating and *paralyzing* effect of the *materies morbi*. Accordingly, free doses of milk-punch and quinine, with six grains of chlorate of potassa were given every three hours.

Locally, the tincture of the chloride of iron, from its peculiar astringent and tonic properties, appeared the most appropriate. This was freely applied three times in the twenty-four hours.

The second day after the commencement of this treatment the fauces were carefully examined, medicated thoroughly with the tincture, and several patches of the exudation removed; the tonsils were much more enlarged and presented a puffy, ash-colored appearance. To diminish the amount of obstruction which these glands offered to the respiration, which was gradually becoming more profound, one of them was freely incised with a scalpel, but without advantage; only a drop or two of dark blood followed the incision. The size of this tonsil was so slightly diminished that the other was not cut. The other local symptoms were gradually becoming more serious; so, also, were the constitutional disturbances—the patient suffering with more prostration and debility, almost to total loss of appetite. There appeared to be a partial paralysis of the lower extremities; still the pulse was as yet comparatively regular and strong. The remedies were continued, increasing the quantity of milk-punch and quinine, which, I may here remark, were continued during the whole course of the disease without alteration. On the succeeding day the patient was slightly worse; the swelling, exudation, fetor progressing with alarming rapidity, with discharges of blood and muco-purulent matter from the nostrils, the encroachments upon the respiration becoming much more serious, interfering greatly with the performance of that function. The general symptoms were also increasing in severity, the pulse becoming more feeble, the countenance anxious, total loss of appetite—in fact, all the symptoms of rapid prostration.

It appeared to me that this child was dying, or would die, not on account of the blood and tissues being poisoned with some *specific* morbific agent, but on account of the *local* disease invading the air-passages, thus interfering with the oxygenation of the blood, and still more prostrating the patient, and perhaps accounting for those dangerous sequelæ of diphtheria which often of themselves give rise to fatal results. Knowing that my remedies would be entirely useless, and that the patient would die unless the obstruction to the respiration was relieved, I determined to open the tube below the seat of obstruction, first cutting through the crico-thyroid membrane, to extend it afterward through the upper rings of the trachea, if necessary.

Having recounted to the parents as clearly as possible the nature of the case, and the hazards and doubtful character of the operation, they finally gave their consent to its performance. The difficulty of respiration being much increased, it was determined to perform the operation at once, although it was night, and no reliable assistant at hand. The child was placed recumbent upon two chairs, and a few whiffs of chloroform given to produce perfect quietude; the crico-thyroid membrane was carefully felt for, and a vertical incision, three-quarters of an inch in length, made along the mesial line, the sterno-thyroid muscles separated, and the membrane opened by a cross cut. The hemorrhage was slight; the inferior laryngeal artery which crosses the membrane was cut, but yielded readily to pressure; two strips of sheet-lead, about one-quarter of an inch wide and

two inches long, bent into hooks, were inserted into either edge of the wound and tied around the neck with pieces of tape; a full opiate, corresponding to the age of the child, was given, and the patient left for the night. Three days after the operation, a manifest improvement had occurred in the general symptoms; the throat, also, had much improved; it appeared that the constitution was being enabled to resist the local disease; large patches of the exudation were removed, the surface beneath presenting a more natural and healthy appearance; the discharge from the nostrils still continued, but much thinner in consistence, containing less blood, and much less acrid.

On the eighth day the patient was still improving; appetite good, tongue clean, bowels regular, and the countenance of that pleasant, peaceful, placid look peculiar to childhood.

The case continued to improve both constitutionally and locally. On the twelfth day the fauces were looking quite healthy, and the artificial wound healing kindly.

Variola.

By Geo. Pepper Norris, M.D.,
Physician to New Castle County Almshouse, Wilmington, Del.

The occurrence of a large number of cases at the hospital under my charge has induced me to send you a few lines respecting the treatment of this disease. Forty-five patients were suddenly thrown into the hospital without any intimation of their arrival, late on a Saturday night, after being taken from their beds, and brought over twenty miles through the worst of roads; the house being completely unprepared for their unexpected arrival, was without the most necessary conveniences for so large a number of cases. All were colored, of every age from three months to fifty years, and presenting the disease in every stage, from the initial fever to those with whom the eruption was in a condition of maturation. The mild cases were separated, as soon as possible, from those of a confluent character, and the treatment commenced with a view of moderating the amount of pustulation, of subduing the effects of inflammation, and supporting the strength, where deemed advisable. The mild cases, after separation, were put to bed, and thorough ventilation of the apartments insisted upon; how difficult the latter necessary precaution is to obtain, will only be known to those who may have under their hands a number of negro cases, the predilection of the black for fire being so great that he will determine on roasting himself even if assured he is thereby endangering his life. *A strict diet*, together with light clothing, and proper doses of spiritus mindereri and neutral mixture, were all that was necessary to bring all safely through. To several, whose bowels were not easily kept in a soluble condition, the following mixture was directed:—

℞.—Magnesia sulph. ℥ss;
Aqua font. ℥iij;
Antimon. et potass. tart. gr. i;
Spts. ætheris nitrici, ℥iv;
Sirup limonis, ℥j.
Ft. Mist.
S. A tablespoonful every four hours.

With the confluent cases a more active treatment was adopted, five-grain doses of pil. calomelanos comp. was directed, followed in the morning by drachm doses of magn. sulph. to those whose liver appeared in a torpid condition; the others were gently purged with the compound cathartic pill; the neutral mixture, but especially the effervescing draught made with fresh lemon-juice, was particularly grateful to those whose stomachs were irritable; cold applications to the head, and warmth to the feet, applied by hot bricks, gave much comfort; an occasional sponging of vinegar and water directed for those in whom the eruption was not yet developed. Venesection was in no case even thought of—being well satisfied that in any of these cases the results would have been highly prejudicial. Five-grain doses of Dover's powder, repeated if necessary, was administered to those who were restless, and unable to obtain sleep—with the most satisfactory results. With several, in whom the eruption about the face threatened to be excessive, warm pediluvia and mustard poultices produced marked effects.

After full development of the eruption, the treatment was restricted to the refrigerant diaphoretics, cooling acidulous drinks, light clothing, and chlorate of potash, in the following doses:—

℞.—Potassæ chloras. ℥ij;
Sacch. alb. ℥ij;
Aq. cinnamomi, ℥vj.
Ft. Mist.
S. A tablespoonful three times daily.

On the occurrence of the secondary fever especial care was taken to guard the strength of the patient; throughout the disease as great an amount

of cleanliness as is compatible with the nature of the hospital, and the well-known character of the negro, was directed; and to this, together with the ventilation, many, I am satisfied, owe their recovery.

Five deaths occurred in all—of these, one was brought in comatose; two were pregnant, between four and six months, both of whom died—they were among the worst cases, and no hope of either was had from the first; of the other two, who can only be fairly classed as dying under treatment, one died on the eighth day of the disease from a combination of laryngeal and pneumonic inflammation, the other on the twelfth from the prostrating effects of the suppuration; another, in whom death was confidently expected, was saved by the timely administration of moderate and repeated doses of brandy-punch. During the latter stages, benefit, I am satisfied, was derived from tonics, especially quinine, port wine, and brandy. In one case, in which the patient suffered much from pain and diarrhœa, the following formula was resorted to, with good effects:—

℞.—Morphiæ sulph. gr. j;
Pulv. camphoræ, 3ss;
Ol. carui, gtt. x;
Mel. opt. q.s.
Ft. pil. No. xvj.

S. One every two hours, until pain or diarrhœa is relieved.

I noticed that no patient died in whom the eruption was prominent; by this, I mean, in whom the pocks were considerably raised above the surrounding skin; in all in whom death occurred, t appeared the system lacked vitality sufficient to give the pock its marked characteristic expression; and in them the pocks were depressed and flat. All of the patients were entirely unprotected by vaccination, except a few in whom it had been recently performed after the disease had broken out, and in none of whom was the confluent type exhibited. I vaccinated several of the children who were brought with the party, on the day after their arrival, and all have escaped the unmodified form of the disease. In the majority of confluent cases, who recovered, the noted swelling of the extremities occurred.

Chemistry questions the light of the sun, and detects the vaporized metals floating around the great luminary—iron, sodium, lithium, and the rest—as if the chemist of our remote planet could fill his bill glasses from its fiery atmosphere —*Holmes' Border Lines.*

Compensatory Art.—No. 2.

By B. Frank Palmer,
Surgeon-Artist, Philadelphia, Penn.

WHERE AND HOW TO AMPUTATE.

The first signally successful invention of an artificial limb in this country, in 1846, aroused a spirit of inquiry among the profession concerning the points of amputation best adapted to the use of a scientifically-constructed substitute, and at the solicitation of many eminent surgeons, I wrote a series of short articles on the subject, which were received with great favor.

Often, in cases which admit of most favorable amputation, (near the ankle,) a most unwarrantable portion of the leg is removed, and not unfrequently the knee is permitted to remain semiflexed so long as to become incapable either of full flexion or extension; while in innumerable instances a healthy joint is found *fully flexed and permanently* useless for want of a little care in healing. Such practice cannot be too strongly reprehended. Amputation at the knee or ankle joints is a very objectionable practice, and cannot be too speedily abandoned. In this operation the remaining condyles give enlargement and unfavorable shape to the end of the stump, and the *extreme length* interferes with a perfect combination of the artificial mechanism.

Amputation of the foot *through the tarsus* is worse for the patient, also, than above the ankle. Aware of the opposition this opinion will meet, I have not ventured to publish it, until able to give the result of experience in treating many cases. This operation *does not admit of a neat or durable substitute*, and the leg is more encumbered than if amputated above the ankle-joint. If removed through the tarsus, and particularly if no more of the bones than the astragalus and calcis remain, the *point of amputation is invariably drawn downward* by the contraction of the tendo Achillis, (its antagonistic muscles being destroyed,) and the patient is rarely, if ever, able to support any considerable portion of his weight upon the heel. The support is, necessarily, upon a socket inclosing the leg. The false foot and ankle are less perfect, the natural heel cord does not perform its function, and an adequate artificial tendon is supplied with great difficulty.

It is a subject worthy of debate whether, in case *all* the bones of the tarsus could be saved,

(and no more,) it would not even then be preferable to amputate *above the ankle.*

It is obvious that artificial joints and tendons can never be made to act by mere volition, yet the well-adjusted substitute may be made to respond to the movement of the living member; and it requires no argument to show that the mechanical limb may be moved by *lever power* as readily as the natural one. The stump may be termed a lever, which, aided by auxiliary appendages attached to the thigh or body, moves the false leg. Upon the length and fitness, then, of the stump depends in a great measure the success in locomotion. The *greatest length possible* should be saved, (except when variations of the rule are demanded,) and if the living portion be radically defective in length or flexibility, art, though it may mitigate the suffering, can never fully supply the deficiency.

In amputating a thigh, the condyles of the femur should always be fully removed, but *no greater portion*, unless the safety of the patient demand it. The best amputation possible is of the *leg, ten inches below the inferior edge of the patella*, though it is always advisable to amputate high enough to secure a good flap, which is very important, as it prevents such unpleasant sensations as arise from a slight tension of the thin skin too often found to be the only covering of a protruding bone. If a stump must necessarily be less than four inches in length *below the knee*, amputate *just below the tuberosity of the fibula*, so that the knee may be flexed, and an artificial joint applied without exhibiting a protruding stump. This rule will apply in amputation for anchylosis of knee, if the joint be not diseased; should it be *extended*, however, amputate *above the knee.* Perfect use of the knee-joint should always be secured, even if the stump is too short for use in walking.

Dr. Pancoast, in his work, has well said that the place of amputation "must be held subsidiary to another object, that of affording the greatest facility in the adjustment of the means of artificial support." Such, also, was the opinion of the great Ambrose Paré and of Baron Larrey.

The method of Mr. B. Bell, of "amputating *above the knee* when the operation cannot be performed near the ankle or just *below the calf of the leg,*" is very extraordinary and erroneous. Yet Mr. Thomas Wakley, the distinguished surgeon, and editor of the London *Lancet*, has, through that eminent journal, given publicity to an equally objectionable theory, to wit: "Amputation of the *leg* should never be performed upon children, but the *lower third of the thigh* unhesitatingly selected; for this important reason, that the amputated limb ceases to grow in uniformity with its fellow, and the patient is doomed to the additional inconvenience of having one knee-joint elevated perhaps some inches above the other, and imparting to his gait a peculiarly grotesque appearance."

The *Lancet* is a potential journal, and to Mr. Wakley I am indebted for acts of personal courtesy while in London; also, for an elaborate article upon my Artificial Leg. I reluctantly take exceptions to anything published in the *Lancet*, but feel constrained to state, for the benefit of young unfortunates, that the strongest argument that could be adduced in *favor* of amputations *just below the knee joint*, is found in the fact that the limb "*ceases to grow in uniformity with its fellow;*" for thus the patient is enabled to support his weight *on the knee*, and, having a space of "some inches" in which to arrange the perfect artificial knee-joint, I provide in this case what is inferior only to the *best application possible*, which is to a stump of about ten inches below the knee, usually, or an amputation at the *lower third.* It is added in the *Lancet*, that in case an "Artificial Leg" is to be employed, "if an entire *third* of the leg cannot be saved, it is far more to the advantage of the patient to select the *lower third of the thigh* as the point of amputation." This is certainly a strange and unnatural view, and I am very happy to observe that it is not given as Mr. Wakley's theory, but as the opinion of the present manufacturer of the Anglesea Leg in London. The solution of this most objectionable opinion is found in the fact that, without the benefit of a later improvement than that of Mr. Potts, the present manufacturer has no adequate arrangement for an operating joint—it requiring, according to the *Lancet*, about "five inches for the knee," which elongation of the thigh really *would* present a "peculiarly grotesque appearance."

With the present means of adapting a substitute to a flexed knee, so as to give perfect motion of an artificial knee-joint, and without perceptible elongation or enlargement of the thigh, I find very *superior advantages* in this stump. Amputation at *any point below the knee* is preferable in all cases, if safety in healing may be apprehended, and if there be no abnormal condition of

the knee-joint to forbid such an election. If the knee be diseased, or anchylosed, and the *joint fully extended*, or only *partially* flexed, in such manner as *to prevent supporting the weight of the body on the knee*, then, indeed, the lower third (or fourth) of the thigh should become the point of election; otherwise *never*.

The operation for the application of this leg should be so performed as to allow the end of the stump, when flexed, to fall *one inch* back of the thigh, to form a sort of grapple, as it fits the concavity of a socket, by which means the limb may be held securely in its place without any appendages connected to the waist or shoulders. The end of the stump is so secure from all pressure (in the hollow of this flexible socket) that use does not produce excoriation or inflammation, and I have in repeated instances applied the limb in the Jefferson College within six weeks from the day of amputation, without any danger of immediate or remote inconvenience to the wearer.

Professor Syme's operation, at the ankle-joint, is recommended in a recent edition of Miller's Surgery, as furnishing a stump "more useful in progression" than an amputation above the ankle. This opinion is entertained by many eminent surgeons, with whom I regret to differ. I do not recognize all that is claimed for this operation, yet it may be preferable to excision of the foot *through the tarsus*, as done by Baudens or Chopart, or removal at any point above the metatarso-tarsal joint, as performed by Lisfranc.

I occasionally have cases of *amputation through the tarsus* presenting well healed and eminently *useful* stumps. It is the case in Sédillot's modification of Chopart's operation, the cuboid and scaphoid bones remaining, to which the flexor muscles are so well attached as to *counteract* the antagonism of the tendo Achillis, thus retaining the heel in a position to support the weight. But I should observe that these cases are *very rare*, and I am almost weekly appealed to by patients who, having suffered this mutilation, find that the *careful treatment of years* will not heal the stumps. The contraction of the gastrocnemii muscles causes such depression of the cicatrized surface that the least attempt at walking keeps up ulceration of the cicatrix, which is often followed by *caries of the bones*. I have taken several such cases to the Jefferson College for amputation *above the ankle*, all of which resulted most favorably.

It is probable that no form of amputation practiced within the last century has escaped my notice; and I have, I believe, examined the work of every leg-maker of any repute on either side of the Atlantic.

I have fitted about 1000 limbs to thighs amputated within *three inches of the perineum;* 1500 to thighs *not more than six inches long;* nearly 1000 upon the knee, (flexed;) about 1200 to short stumps retaining use of the natural knee-joint; 1400 to longer stumps, (the best;) nearly 500 others, including several for *disarticulation at knee and ankle joints, and through the foot;* some of the latter cases retaining only the os calcis, others the astragalus and calcis, others still, a part or all of the bones of the tarsus, and a few retaining the metatarsal bones. I have also made various instruments for congenital deformity.

An ample and well-adjusted *flap* is, in all cases, highly desirable. The double flap of Liston is admirably suited to my uses. In no case is the patient allowed to support his weight *upon the end of the stump*. Velpeau, Pancoast, Lisfranc, Baudens, and others cite cases in which it is possible to do this in case of *disarticulation of the knee or ankle*. I have seen a German, named Gebhardt, who placed the end of his thigh —amputated *above the knee*—upon a cushion of hair in a peg-leg, and thus walked; and two of my patients, Mr. Moorhead and Mr. Butler, both of this State, having been amputated at the *middle third of the leg, can* walk in the same manner; but it would be dangerous *in the extreme* to allow this in active use, as in case of a falling, or any *unusual* pressure, the bones might be *forced through the skin*. The weight of the body is supported by an even pressure around the whole leg, near the knee-joint, (if amputated below the knee,) and a flexible socket, attached by means of auxiliary side-joints, is laced to the thigh, usually, to enable the patient to graduate the pressure as he finds most proper.

If the thigh is amputated, the pressure is adjusted to its conical walls *near the body*, but there must be *no direct pressure against the perineum*, as excoriation would follow. The *end must be entirely free from all pressure, as well as in case of application below the knee*. The joints of the knee and ankle should be made perfectly flexible so soon as cicatrization will admit of full flexion and extension.

The stump should be tightly bandaged for several weeks previous to the application of the arti-

ficial limb, to facilitate absorption and give the stump conical shape.

I submit the following, for the surgeon's consideration, in amputating the *leg* and *thigh*.

PALMER'S PLACES OF ELECTION.

1st place of election. The *lower third or fourth of the leg*. Flap operation. Remove the malleoli fully *always*.

2d. The lowest point possible between the first place of election and the upper third at which a good *flap* can be made.

3d. Immediately below the tuberosity of the fibula, if not practicable to save four inches below the patella, *with full use of joint*.

4th. The lower third of the thigh—*ten inches from perineum*. Always fully remove the condyles of the femur. Flap operation.

5th. *The utmost length possible*, if necessary to amputate above the fourth place of election. Flap operation.

And these points have the sanction of the most eminent surgeons, not only of this, but of other countries. See Professor Blackman's edition of Velpeau's Surgery, Gross's American System of Surgery, etc.

After the lapse of years since the above views were first given to the public, I find no occasion to modify them. The operation of Pirogoff, at the ankle, has, it appears, been abandoned by himself; and doubtless the other operations recommended at that point may prove less satisfactory than at first anticipated, which will still further confirm the correctness of my views. And in order to correct any misapprehension on this point, I will here say that the views of amputation given by Dr. E. D. H., in the *Pamphlet of Palmer & Co.*, New York, were, many of them, published by *him*, and under my *protest*. I *did* not, and *do* not sanction the publication of them, and am not, at this time, associated with him in business.

Chemistry spreads the sensitive film on the artificial retina which looks upon us through the optician's lens for a few seconds, and fixes an image that will outlive its original.—*Holmes' Border Lines of Knowledge in Medical Science.*

Chemistry lends the power which flashes our messages in thrills that leave the lazy chariot of day behind them. It seals up a few dark grains in iron vases, and, lo! at the touch of a single spark, rises in smoke and flame a mighty Afrit, with a voice like thunder and arm that shatters like an earthquake.—*O. W. Holmes.*

Illustrations of Hospital Practice.

PHILADELPHIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. Da Costa.

February 8, 1862.

RHEUMATISM.

Several cases were presented, the one, a male, admitted to the wards on the fourth of January, had rheumatism for many years, attended with frightful disfiguration of the joints. His case was considered a hopeless one by those who attended him, but he is now nearly well. His treatment has been iodide of potash, in three-grain doses, with wine of colchicum, and lately, blisters to the joints dressed with strychnia.

Another case was that of a female, aged twenty-three, a house servant; has been sick about three years, and has had rheumatism about four months, attended with pain and swelling of the joints, especially of the knee, rendering them stiff and tender. She has, also, a fluctuating enlargement on the side of each knee-joint, evidently connected with the joint, and resulting from the rheumatism. She was treated in a similar manner, and is recovering. The results thus obtained in several cases of sub-acute and chronic rheumatism in this hospital, from the use of iodide of potash, are very gratifying.

A third case was subsequently presented to the class, of a male twenty-two years of age, laborer, admitted December sixteenth, for rheumatism. Two years ago was addicted to masturbation and suffered from nocturnal emissions. In May last, a gradual stiffening of the joints commenced, and soon thereafter a swelling made its appearance upon the back of his neck, after a night's exposure. It is situated directly over the spinal column, and is undoubtedly connected with a morbid state of the fibrous tissue of the ligaments, etc. in that region. It has not interfered with motion nor with sensation; but if left to increase would end in paralysis, as, indeed, I saw in one case. The prognosis is not unfavorable. The treatment shall be repeated blisters, allowing the surface to heal and then painting with iodine. He may also take eight grains of iodide of potash, three times a day, in a tablespoonful of mint-water.

PNEUMOTHORAX—AUTOPSY.

This was the case of a female mentioned in our report for last week, an unfavorable prognosis of which was given at the time she was before the class. The pleura of the right side was found very much thickened, and a large quantity of fluid was contained in the pleural cavity. Behind this, laying near the vertebral column and greatly compressed, was the lung. On opening the cavity, air rushed out with a loud noise, and we see here the perforation of the lung through which the air escaped into the pleural cavity.

These openings are seldom seen after death, for nature generally closes up the aperture. The thickening of the pleura is remarkable. From the date of the perforation of the lungs it was six weeks to her death, which will account for there being no signs of recent but all of chronic pleurisy. The right lung has a few tubercles; liver enlarged, a specimen of the nutmeg liver, or fatty liver, with portal congestion; spleen soft; kidneys much congested; stomach enlarged, distended with air, congested.

PNEUMONIA.

P. S., aged forty. Irish laborer, temperate, was admitted to the medical wards on the 27th of January with dyspnœa. On examination, marked dullness was found on percussion over the upper portion of the right lung. Auscultation revealed the crepitant râle and tubular respiration. His pulse was 124; sputa rusty color; respiration 40 per minute. He had fever, and exhibited all signs of acute consolidation of the lung. He was placed upon acetate of ammonia, with wine of colchicum. Dry cups were applied to his chest, and he had a moderate quantity of milk-punch, with beef-tea. Under this treatment his pulse is now 72; his respiration 24; he sleeps well; his sputum has lost its rusty color; the dullness on percussion has almost entirely disappeared; he has no tubular breathing; and there is only a slight rudeness of the respiration. There are two points of interest in this case, and which are worthy of notice. The seat of the inflammation is unusual. It is in the upper lobe of the lung. Pneumonia usually attacks the lower lobe, and then extends to the upper; here it is confined to the upper; and this is important both in diagnosis and prognosis. Inflammation of the upper lobe of the lung is more apt to be fatal. An unfavorable prognosis must generally be given, as even when recovery takes place from the inflammation, there is great tendency left to the rapid development of tubercles. Great caution should, therefore, be observed during convalescence, by the use of such agents as will counteract that tendency.

In the second place, notice the treatment. The patient was not bled. Counter-irritation was used. Bleeding does not, so far as my observation goes, exert a favorable influence in pneumonia, *per se*, and yet that is the routine practice. It may relieve, but it cannot cure. I do not hesitate, in many cases, to give stimulants, and to support the strength by beef-tea, etc. The disease runs a certain course, and the patient commonly recovers. The duty of the physician is to see that the changes in the lung go on with regularity, and to apply his remedies so as to aid nature in throwing off the disease.

February 12*th*.

BRIGHT'S DISEASE — ENLARGEMENT OF LIVER — PULMONARY FISTULA — AUTOPSY.

This case, the post-mortem examination of which is now before you, was that of a German, who was presented at the clinic on January 25th, (see last Reporter.) Between the 8th and 9th rib of the left side an opening formed, through which pus was discharged some days previous to his death. The left lung was found adherent, and the opening just alluded to was an outlet entirely bounded by adhesions. This will explain why the patient had not pneumothorax. The right lung is infiltrated with serum, and highly œdematous. The liver is enlarged, firm in structure, cuts smoothly, and has a glistening appearance. It is that form of liver called by some writers albuminous, by others scrofulous; kidneys mottled, about normal size, but structure evidently changed.

RHEUMATISM — SUBACUTE.

John Smith, aged fifty-two, shoemaker, intemperate, was in good health until five months ago, when he had a fall injuring his thigh, which was followed by rheumatic pains and loss of use of limbs. In this condition he was admitted to the hospital September 20th 1861. Gradually his shoulders, arms, and fingers became swollen, and the joints enlarged. Had considerable swelling of the knees about January. His treatment consisted of iodide of potash, ten grains, wine of the root of colchicum, ten drops, three times a day, under which he has gradually improved.

This is now the fourth case of subacute rheumatism I have shown you in which this treatment has proved successful. The colchicum is not beneficial in acute rheumatism; but is an excellent remedy in the subacute form, and in combination with iodide of potash.

ACUTE PNEUMONIA — DISEASE OF HEART.

Geo. S., aged twenty-two, was admitted to hospital on the 27th of January, with fever; shortness of breath; frothy expectoration; pulse 112; respiration 48 per minute. Had been usually in good health; was sick six days before admission. The dyspnœa, he says, came on suddenly after a severe cold. On examination, marked dullness was found on the right side of the chest, both anteriorly and posteriorly, with tubular, respiration, and slight crepitation limited to inspiration. The left lung was healthy, save some few râles. Patient was quite weak and exhausted when admitted. Dry cups were applied to his chest, and internally he took a combination of ammonia, nitre, and wine of ipecac., and in addition ℥jv of brandy during the twenty-four hours. At the last examination, there was no dullness on percussion, and no bronchial respiration. His pulse is 90, and his respiration 30 per minute. The cups applied some days ago relieved the dyspnœa, but did not modify the disease. In this case, and the one presented at the last clinic, you have the favorable results of the treatment we have pursued, and the lesson they inculcate is *to avoid routine treatment*. In these cases a stimulant course has proved beneficial. There are cases, no doubt, which will be benefited by blood-letting, but I am confident the disease, as such, does not always demand the antiphlogistic

treatment. But you should examine each case carefully, and apply such treatment as each requires, regardless of routine.

You will notice a peculiar symptom in this case, and that is the absence of rusty-colored sputa, said to be diagnostic of pneumonia. His dyspnœa continued till the eighth instant, during which time he coughed and expectorated freely; but the sputa have never indicated the presence of pneumonia. Another peculiarity is the tense, jerking pulse which we find to be produced by a chronic disease of the heart, unknown to the patient. For this complication he may now take gtt. ji verat. viridi three times a day, to be carefully watched. His stimulants may now be discontinued.

TYPHUS FEVER.

This case was admitted to the wards on the twenty-fifth of January, with all the symptoms of idiopathic fever, attended with brain symptoms. He had been sick eight or ten days previous to his admission. On the twenty-sixth an eruption appeared all over his body, which was not modified by pressure. He had no abdominal tenderness; bowels constipated. These symptoms indicated typhus in contradistinction from typhoid fever. The former is a low, contagious form of fever, and the patient was immediately isolated, so as to prevent if possible the disease from spreading in the wards. The cerebral symptoms predominated, while the abdominal, which mainly distinguish the true typhoid fever, were absent. A blister was applied to his neck, small doses of tart. ant. were given internally, and he had good nourishment. Under this treatment he became convalescent on the eighth. As a general rule, typhus fever is best treated with stimulants; but the cerebral symptoms in this case were too prominent to admit of stimulation. The blister to the neck is always admissible. The treatment by tart. ant. originated with Dr. Graves, of Dublin. The object of it is to relieve the congeston of the brain, but it must not be carried so far as to produce prostration. Nor should it be followed out when the cerebral symptoms are not marked. When these are not prominent, the stimulant treatment and mineral aids are indicated.

New Jersey Volunteers. — Surgeon H. Genet Taylor, of the Eighth Regiment N. J. V., now attached to General Hooker's Division, Lower Potomac, Md., writes us, that—

"Out of over 1300 cases treated in camp since last September, but *two deaths* have occurred —one in general hospital and one in camp. I think we can safely say we are the most fortunate in the service, considering that we have now been five months in the field. Our cases average (in round numbers) about 275 per month, as our reports will show, as follows: October, 177; November, 268; December, 327; January, 303; and February, about 320—not less, as up to day we number, for this month, 298."

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, MARCH 1, 1862.

THE AMERICAN MEDICAL ASSOCIATION.

The condition of the country, the entire absorption of the whole population in the then outbreaking war, rendered it advisable, in the opinion of the committee of arrangements, to postpone the annual meeting of the American Medical Association in June last. In this postponement there was a general acquiescence. The war is not yet ended, but a gleam of light is visible. The dark clouds which had overshadowed our beloved country for the last few months begin to break away, and the eye of faith in the perpetuity of the Republic catches with joy the rays of sunlight that beam beyond. The reasons for another postponement do not, therefore, seem so evident or paramount; and, in some quarters, quite urgent appeals are made for an early notice of the time and place, when and where the meeting shall be held. Topics of discussion even, are proposed for its deliberations. For ourselves, we are content to abide the decision of the committee, in whose keeping the whole matter is appropriately placed. The interests of the profession have always been, and doubtless will still be, promoted by this annual gathering of medical talent from all quarters of our country. But, in the present juncture of affairs, the Association would, no doubt, be made up mainly of the profession north of Mason and Dixon's line. The vice-president, Dr. R. D. Arnold, of Georgia, whose patriotic utterances at the last meeting of the Association, at New Haven, on occasion of the visit to East Rock, must be fresh in the memories of all who heard them, could hardly be expected to be present. And others, like him, whose hearts are still with the Association, may be compelled, by force of circumstances to absent themselves.

We venture the suggestion, then, whether it be not better to hold no meeting till our Southern brethren can unite with us around our common altar.

We are not among those who look upon surgeons or medical men as belligerents in war, in the offensive sense of that term, unless they enlist as soldiers for that purpose. The mission of the surgeon upon the battle-field, or in the camp or hospital, is one of mercy, and not of vengeance. It is his business to bind up wounds, not to

inflict them; to carry words of cheer to the sick and wounded soldier, not to spread terror and desolation among them; and where this peculiarity is exhibited most prominently, the beauty and dignity of our noble profession shines out the brightest.

Viewed in this light, we see no reason why, ultimately, there may not be a reunion of the entire profession of the whole country at some future annual gathering of the Medical Association. Not, perhaps, in June, 1862, but may be in June, 1863, this grand desideratum may be obtained. Would it not be better, then, to postpone the meeting still further, that such a reunion, which would demonstrate the benevolent and fraternal spirit of the medical profession, may take place?

And besides, are there any interests that would seriously suffer, if a meeting of the Association was not held this year? There is no dearth of appropriate topics for discussion and deliberation. The events of the present are full of interest to the profession generally; and yet, so far as subjects for discussion and action have been proposed, we cannot discover any one of such vital importance as to demand immediate decision or action. The Association, we are confident, will never stultify itself, nor dignify any phase of quackery, by any concerted attempt to enlist the arm of legal enactment in a crusade against it. Nor is it at all desirable that any such a ridiculous farce should be attempted before a body of men standing so high, in point of intelligence and scientific research, as the American Medical Association.

And then, again, would it not be better to avoid the public recognition of a position, which the march of events has not yet fully determined to be fact, that the medical profession of this country are divided by geographical lines? The estrangement, if any there be, between men engaged in the same great philanthropic mission, in the same benevolent and sacred calling, can be only momentary. With the exciting occasion of it, it will all disappear. But we are unwilling to recognize its existence, and would greatly prefer that the fact should be fully demonstrated to the world before any act of the American Medical Association should reveal or develop it.

We offer these suggestions for consideration, having no other design, in making them, than the good of the *whole* profession in our *whole* country.

THE FOUNDLINGS IN THE PHILADELPHIA ALMSHOUSE.

One of the serious responsibilities that rests upon our municipal authorities is the proper method of caring for the unfortunate infants which are cast off by unnatural mothers and left to perish on door-steps, in the street gutter, or by-paths of our larger towns and cities, unless accident leads to their discovery before life is extinct. These unfortunates are usually the offspring of abandoned women, who take this method of relieving themselves of responsibilities which would interfere with their illicit mode of gaining a livelihood.

What is to be done with these foundlings? Neither law nor humanity will permit of their being allowed to perish after being discovered—of their being deprived of life in any way. Yet there are those who are jealous of proper care being taken of them, fearful of encouraging prostitution, if it is known that when "an accident" happens the issue will be properly cared for; that it will not be necessary to add the crime of infanticide to the rest, in order to hide guilt, and leave the incontinent mother free to pursue her evil course of life untrammeled by the duties incident to maternity.

Fortunately for the cause of humanity, and the credit of Philadelphia, the present Board of Guardians of the Poor of this city are not of this class. When the Board was constituted in 1859, the foundlings were kept in the general nursery of the Almshouse, and were placed in charge of women with infants of their own as "boarders." It was expected that these women would share their breast-milk with the foundlings, making up any lack of nourishment to the infants by feeding them with cow's milk, etc. The Board found that the plan was not working well. It was based upon a false assumption. It was assumed, and probably supposed, that these women divided their nourishment equally between the two infants, or at least that the "boarder" was properly fed with cow's-milk, if the mother had not sufficient for both. Maternal affection deprived the unfortunate boarder of nutriment from the former source, and indifference or laziness from the latter; while it is more than probable that laudanum stealthily did its share of the work; for *nearly all the foundlings died.* Only now and then one would escape the almost universal fate, and these were witnesses to the fact that now and then a woman would be found who

would do her duty by the infant placed under her charge. This terrible mortality was attributed by universal consent to the vicious origin and early exposure of the foundlings.

The new Board, however, having no traditionary notions on the subject, could see no reason why the mortality of foundlings in Philadelphia should reach the extraordinary rate of over ninety per cent., while in France and England it did not reach fifty per cent.; and they set themselves about remedying the evils in the existing system of caring for them.

With this view, they had spacious, well-ventilated rooms fitted up in the Children's Asylum, to which the foundlings were removed, and placed under the care of the matron of that institution, who has been unremitting in her attentions to the little outcasts. They are fed on cow's milk diluted with water, and sweetened with loaf-sugar, and receive the constant care of competent nurses. The result has been all that could be desired. The heart of the visitor is no longer sickened by the wan features, pinched countenance, and pitiful moanings, as in former times, excepting in a few cases where the iniquities of the parents are visited upon the children, and neither kind nursing nor intelligent medical attention can avail to save life. In these Foundling wards may now be seen as fine and hearty-looking babes — some sixteen or twenty of them—as can be found in any nursery. From present appearances, we do not doubt that the mortality of the foundlings in the Philadelphia Almshouse will be reduced fifty per cent., perhaps more.

This result is alike creditable to the philanthropy and humanity of the Board of Guardians, and to the city whose representatives they are; and, we may say, that it is but *one* of the beneficial results flowing from the enlightened and humane policy adopted by them in their whole management of the Almshouse department. Our readers should not fail to visit the Almshouse and notice the improvements that have already taken place, and those in progress, that they may exert their influence in support of a truly wise, humane, and economical administration of an important and very expensive department of the city government.

Rush Medical College, Illinois.—The number of graduates of this college, at its late session, was 36.

EDITORIAL NOTES AND COMMENTS.

The Insane Department of the Philadelphia Almshouse.—The annual report of Dr. S. W. Butler, the physician and superintendent of this institution, is before us for the year 1861. The number of admissions during the year was very large, namely, 415—193 men and 222 women. These, added to the number in the institution January 1, 1861, 475—174 men and 301 women, gives a total of 890—367 men and 523 women —who were under treatment during the year. There were discharged during the year, *cured*, 158—83 men and 75 women; *improved*, 94—44 men and 50 women; *unimproved*, 35—16 men and 19 women. The deaths were 80—36 men and 44 women, being 9 per cent. of the number treated.

The number of patients was increased during the year by the unsettled condition of the country. The results of treatment were quite satisfactory, when it is considered that a majority of the patients admitted to hospitals for the insane connected with almshouses are chronic and generally regarded as "incurable;" and when it is considered, too, that the facilities for curative treatment in such institutions are not usually of the first order. Of the whole number discharged during the year, 68 per cent. were discharged *cured* or *improved*.

About sixty per cent. of the patients treated were foreigners, forty-four per cent. being natives of Great Britain. Thirty-eight per cent. were natives of the United States, of which twenty-nine per cent. were born in Pennsylvania.

Something has been done during the year toward giving employment to the patients, by the establishment of a sewing-room and a shoe-shop. A number are also employed in the garden, who raise nearly all the vegetables (except potatoes) consumed by the patients.

Library of the Philadelphia Hospital.—The medical library of the Philadelphia Hospital, which once enjoyed the fostering care of some of the brightest lights of the profession in this city, has been very much neglected for some years past. Many valuable works are missing from its shelves, and but few additions have been made to the library for several years, until last year, when over fifty volumes were added. Among these is a complete set of the Reports of the Registrar-

General of England for sixteen years, from 1839 to 1855.

The library now contains 3447 volumes, among which are many exceedingly valuable and rare old works. In 1831, a complete catalogue of the library was published by Dr. E. F. Rivinus. It is proposed to prepare a new catalogue for publication this year, which shall include all the works added, to the present time. Efforts will also be made to fill the existing blanks in the library, and to put it in complete order once more.

The death of Prince Albert from typhoid fever continues to be a topic of interesting discussion in the British medical journals. It seems to be thought remarkable that an individual whose surroundings, in a hygienic view, had always been of the most favorable character, and who had been unusually careful of his health, should perish from an affection which seems so generally associated with neglect of cleanliness, impoverished diet, and foul emanations. It seems to be conceded that there are in the vicinity of the residence of the royal family at Windsor local causes to which the illness might be attributed. An epidemic of typhoid fever prevailed in that neighborhood two years ago, which was clearly traceable to bad drainage as its cause. It is asserted that the drainage and ventilation of the castle itself are as perfect as under the circumstances they can be, yet it is at the same time admitted that "bad smells very frequently occur there, and are a source of annoyance." The attention of our own municipal authorities to the removal of the local causes of this zymotic and generally preventable disease, cannot be too strongly urged by the profession; for experience has fully proven the almost invariable association of typhoid fever in towns with defective drainage.

The late Dr. L. V. Bell, Brigade Surgeon.—The cause of death of this excellent physician was rheumatic pericarditis, caused by exposure incidental to his military duties. He died in his tent after a short and painful illness. Dr. Bell was best known to the profession as physician to the excellent institution for the insane at Somerville, Massachusetts. He was also at one time President of the Massachusetts Medical Society, has held several prominent political positions, and was once a candidate for the office of Governor of the State.

Dr. Bell was acknowledged, by all who knew him, to be a man of extensive medical acquirements, and for his social virtues was endeared to his associates. His goodness of heart was often exhibited among the unfortunate class who came under his care at the asylum, and it is said that during the retreat from Bull Run he dismounted and placed on his own horse a wounded officer whom he found bleeding by the roadside, while he himself walked all the way to Washington.

From a notice of Dr. Bell in the *Boston Medical Journal* we learn that he possessed considerable mechanical and inventive ability. It is claimed that he was the original inventor of the atmospheric dispatch-bearer or telegraph, an instrument patented by others years after he had given it to the public, and which is now practically in use in Europe. The present method of spinning flax is said to have been his design. His attention was also advantageously given to improvements in architecture, and in ventilation and warming of hospitals and public buildings, and to some surgical contrivances.

The medical profession has not been deficient in its patriotic contribution of labor and life in sustaining the government in crushing the rebellion. One of its members has fallen, mortally wounded, in the front of his regiment. Another, more recently, while pursuing his humane duties, has perished by drowning; and one died while suffering imprisonment for his patriotism at the hands of the enemies of his country. And now we record the no less honored sacrifice of a valued life, from exposure while laboring for the relief of his sick and wounded companions.

Suit for Malpractice Decided.—We find in the *Rockland* (Me.) *Gazette*, the following gratifying intelligence. We designate it as *gratifying* because it adds another to the evidences fast accumulating, that the public mind is rapidly approaching a healthy standard in relation to suits for malpractice:—

"The famous lawsuit, Peter Bryson against Thomas Frye, M.D., of this city, in which damages were claimed 'in the sum of ten thousand five hundred dollars,' for an alleged malpractice in the treatment, 'as surgeon,' of a fracture in the thigh-bone of said Bryson, has, after three years' continuance, at great expense to the defendant, *breathed its last*, during the recent term of the Supreme Judicial Court, held in this city, in and for the County of Knox, Judge Cutting presiding, after having been under the *professional treatment* of A. P. Gould, Esq., of

Thomaston, for seven Court terms, and then passed over, for two terms more, to Lysander Hill, Esq., for experiments in its *dissolution*."

At the same Court—

"The suit, Thomas Frye against Peter Bryson, subsequently brought, *for services*, terminated in judgment for the plaintiff."

Carelessness and its Results.—Another and a distinguished name is added to the catalogue of those who have become the victims of carelessness in putting up prescriptions by apothecaries. Hon. Wm. Pennington, of Newark, N. J., long known as an eminent statesman, died a few days since from accidental poisoning. He was suffering from fever, and was ordered to take eight grains of quinine, instead of which the apothecary, by mistake, put up eight grains of morphine, which the patient took at a dose. It proved fatal in a short space of time, notwithstanding the efforts of his physicians, Drs. Pennington, of Newark, and Parker, of New York, to save him.

Is there no remedy for such carelessness? Is it excusable in one who places himself before the public as an apothecary? If the arrangement of poisons upon his shelves is not such as to render mistakes of this nature next to impossible, it certainly ought to be. If his assistants are so ignorant of the nature and administration of medicines as not to know that morphine is poisonous in eight-grain doses, they assuredly are not competent to put up any prescription, and should not be employed. It would be well if the result of this sad mistake should lead to reform; but such lessons are, alas! too soon forgotten, save by the one who committed the error.

Medical Clubs.—We observe that these associations for mutual improvement among the surgeons of the army are becoming quite common. One has been in existence for over a month in Richardson's Brigade, Camp Michigan, near Alexandria, Va. The society meets once a week in rotation at the quarters of the regimental surgeons; little formality is observed, except in the appointment of a chairman. The discussions are carried on in a conversational manner, and the whole range of the position, duties, and relations of the medical staff and their attendants, is included. A social reunion closes the proceedings. A similar organization has been formed among the army surgeons at Baltimore, of which Dr. Jacob Simpson, U.S.A., is President, Brigade Surgeon John McNulty, Vice-President, and Surgeon Robert Bartholow, U.S.A., is Secretary. The meetings are held at the office of the Medical Director of the city, on Wednesday of each week.

We have no doubt such associations may be made exceedingly profitable.

Quinine as a Prophylactic.— Dr. William O'Meagher, surgeon at Camp Michigan, near Alexandria, Va., thus sums up briefly his experience in this subject. He says:—

"It cures almost all miasmatic diseases; it renders mild, and in a great measure abortive, what would otherwise be a determined case of miasma; it prevents miasma when used as a prophylactic."

Central Ohio Lunatic Asylum.—From the annual report of this institution now before us we gather the following facts: The number of patients in the Asylum, November 1st, 1860, was 252—males, 123; females, 129; admitted during the year, 169—males, 93; females, 76; total number treated, 421—males, 216; females, 205. Of this number, 107 (54 males and 53 females) were discharged recovered; 14, improved; 33, unimproved; 15 died. The percentage of recoveries in recent cases was 84·25; of chronic cases, 25·47; of all cases admitted, 63·31; of all discharged, 63·31. During the twenty-three years of the existence of the Asylum 3857 patients have been admitted—males, 1951; females, 1906; of which 2000 have been discharged recovered—987 males, and 1013 females. The average of recoveries on all admitted is 51·85; on all discharged, 55·47; on recent cases, 71·32; on chronic cases, 24·30. The average of deaths on all admitted is 12·24; on all discharged, 13 09; on recent cases, 9·00; on chronic, 20·00. Of the causes of insanity the largest numbers are referred to ill health, constitutional, 907; puerperal, 306; masturbation, 204; religious, 363; domestic difficulties and afflictions, 506; disappointments, 213; intemperance, 188, etc. etc. The per cent. of hereditary cases was 21·60; of periodical, 8·00; of suicidal, 12·10; of homicidal, 5·03.

The percentage of recoveries in this asylum is comparatively large, over sixty per cent, and speaks well for the ability and skill of the superintendent and his assistants.

In commenting upon the causes of insanity as exhibited in the statistics of this asylum, the superintendent gives prominence to the "constitu-

tional," and thinks many of the cases reported as occurring from other causes may be legitimately traced to this. He refers to intemperance as "fearful in its influence in laying broad and deep the foundations of constitutional insanity," and he "fully believes that stimulant and narcotic agents, which bewilder with temporary frenzy, or stultify and confuse the mind, or depress and enervate the nervous powers of our curiously wrought structure, to be the principal cause of the undoubted increase in the prevalence of insanity, idiocy, epilepsy, and other manifestations of constitutional defects in the brain and nervous organism."

Correspondence.

DOMESTIC CORRESPONDENCE.

Lower Merion, Pa., Feb. 20th, 1862.

Messrs. Editors:—Religious newspapers are so often the advertising media, and clergymen so often the aiders and supporters of everything which encroaches upon the domain of legitimate medicine, that any departure from the general rule is entitled to a prompt and cordial recognition. If the clergy of this country were more accustomed to scientific investigation, and less ready to seize upon every popular medical delusion, the number of heartless swindlers, who vaunt the wonderful curative powers of homœopathy, spiritualism, eclecticism, etc., would much sooner be diminished, and much benefit thereby be conferred upon humanity. *The Presbyterian*, a sterling journal of a conservative religious sect, has, in the issue of February 15th, an article in reference to that great medico-political leper, the Sanitary Commission, which is deserving of attention. Regarding the great injustice which is being done to the profession by the efforts to *disorganize* the Medical Department of the Army, it says: "The blame is laid, and I believe justly, at the door of the Sanitary Commission, certain members of that voluntary organization being the main contrivers of the bill, by which they seek to accomplish this great wrong." Again: "There are other members of that Commission, however, who, it appears, have certain objects to serve, and in order to secure them, they are ready to sacrifice Dr. Finlay, or any one else who may stand in their path. When the Sanitary Commission was appointed, it was not constituted a power superior to the Medical Bureau of the Army. It had no authority to sit in judgment on the Surgeon-General, or on the Bureau. It was not constituted a co-ordinate jurisdiction, to set itself up as a contending or opposing party to the Medical Bureau. Its duties were obvious."

These extracts coming from one of the most able and influential religious newspapers, you may congratulate yourselves that you are not alone in your attempts to crush a great wrong, which crafty and designing men are endeavoring to inflict upon the community. When the idea of a Sanitary Commission first originated, it had the hearty concurrence and influence of all who were interested in the soldier's welfare; it was plausibly supposed that such an immense army of *volunteers* being suddenly sent to the field must almost necessarily be deficient in many articles conducive to comfort and health; that the sick, used to domestic comforts, might suffer in consequence of the absence of appropriate clothing. To remedy this was the legitimate sphere of the Commission, and, so long as they confined themselves to this humane and patriotic object, they had, and were entitled to, all confidence and support. But when a conclave of preachers, lawyers, and *quasi*-philanthropists, of various degrees and calling, *voluntarily* resolve themselves into a Commission, and then, quite as *voluntarily*, re-resolve themselves into a "Star-Chamber" committee, to place upon trial, and declare incompetent the whole Medical Staff of the United States Army, it becomes a matter of vital and serious importance; and the profession is not unmindful of your efforts to throw the light upon the tracks of those busybodies and meddlers who infest the departments at Washington, engineering for the success of this wicked and selfish enterprise.

From the same source, already quoted, I get a new idea as to the cause of the bare-faced impudence of the Commission. It appears that the *religion* of some of the surgeons does not suit the puritanical notions of the reformers! From *The Presbyterian* I quote: "It is well known that religion is influential in this persecution;" hence we must suppose that hereafter it will be necessary for surgeons to pin their conscience to one particular creed, in order to be admitted into the service of their country.

No one believes that the *whole* of the Sanitary Commission is intent upon the same objects; but it is evident that fanaticism here, as well as in many other governmental affairs, holds the sceptre. There are a *few* respected members of the

medical profession in that Commission, and the most judicious thing they can do is to leave it "alone in its glory." The profession would be gratified—and so would the Commission. L.

NEWS AND MISCELLANY.

Cincinnati College of Medicine and Surgery.—The Commencement exercises of this Institution took place on the twelfth of February, after a session of *seventeen* weeks. The number of matriculants was sixty-nine. The degree of Doctor in Medicine was conferred on twenty-nine gentlemen; that of *ad eundem*, on J. S. Crews, M.D., and Adna S. Weatherby, M.D.; and the honorary degree upon C. P. Cummins, M.D., and W. P. Dunnington, M.D.

Cumpulsory Vaccination in New York City.—Dr. Lewis A. Sayre, Resident Physician, presented a long report, on Thursday last, before the Commissioners of Health of New York City. The doctor demonstrated by statistics carefully prepared, that out of one million of persons, the lives of fifty-two thousand were saved by vaccination; and that in armies where, before vaccination was known, the mortality from small-pox was enormous, at the present day, and with the strict attention paid to vaccination, the mortality was trifling. The absolute necessity of general vaccination in a large city like New York, was made so apparent as to lead to the conclusion, that if people will not be vaccinated when the authorities are willing to cause it to be done free of charge, the law should, for the preservation of the general health, compel them to be vaccinated.

A large number of the report was ordered to be printed for general distribution; and the conclusions reached by the doctor having met the approbation of the Board, the draft of a law presented by him was adopted, and will be at once forwarded to Albany for legislative action.

Improved Sponge Tents.—The uses of compressed sponge in surgery have lately become more extended and appreciated. One of the most frequent requirements of the article is for tents, which are used in dilating sinuses and also the uterine cervix in some cases of dysmenorrhœa and sterility. The difficulty of procuring and the inconvenience of preparing effective sponge tents has hitherto prevented their more general use. We have received from A. Mason, 251 Eighth Avenue, New York, an assortment of the best specimens of the article that we have ever seen. The tents are each made of an entire sponge, are properly tapered, and, owing to their great compression, their expansive power is remarkable. We would recommend those who are in the habit of using sponge tents to resort to those made by Mr. Mason, as their use will be found to be more convenient and effective than the ordinary tent.

MARRIED.

Brown—Logan.—On the 14th of January, by the Rev. J. C Carson, Robert Brown, M.D., of Greensburg, to Mary E. Logan, of New Salem, Pa.

Van Giesen—Laird.—At Englishtown, Monmouth Co., N. J., on the 20th inst., by the Rev. Luther H. Van Doren, Dr. R. E. Van Giesen, U.S.N., of New York, to Sarah J., daughter of William Laird, Esq., of the former place.

DIED.

Martin.—At Weaversville, Northampton Co., Pa., February 21st, of bilious pneumonia, Dr. Walter F. Martin, in the 30th year of his age.

Answers to Correspondents.

Dr. J. M. P., Michigan.—The most approved instrument for excision of the tonsils is Fahnestock's, the price of which is $5.

Dr. J. J. D., Indiana.—The new edition of Gross' Surgery is already published by Blanchard & Lea, of this city. The Code of Medical Ethics adopted by the American Medical Association is published by Collins, 705 Jayne Street, Philadelphia. Four red stamps will obtain it.

Dr. S. C. F., Ohio.—The price of Maxson's Practice of Medicine is $4 00. The missing number will be forwarded.

Vital Statistics.

Of Philadelphia, for the week ending Feb. 22, 1862.

Deaths—Males, 167; females, 127; boys, 88; girls, 76. Total, 294. Adults, 130; children, 164. Under two years of age, 94. Natives, 221; Foreign, 55. People of color, 18.

Among the causes of death, we notice—Apoplexy, 6; convulsions, 13; croup, 6; cholera infantum, 0; cholera morbus, 0; consumption, 53; diphtheria, 8; diarrhœa and dysentery, 3; dropsy of head, 2; debility, 17; scarlet fever, 15; typhus and typhoid fever, 13; inflammation of brain, 9; of bowels, 4; of lungs, 17; bronchitis, 4; congestion of brain, 8; of lungs, 3; erysipelas, 0; hooping-cough, 0; marasmus, 16; small-pox, 13.

For week ending February 23, 1861.....286
" " February 22, 1862.....294

Population of Philadelphia, by the census of 1860, 568,034. Mortality, 1 in 1932·5.

Of New York, for the week ending Feb. 17, 1862.

Deaths—Males, 194; females, 209; boys, 110; girls, 108. Total, 403. Adults, 185; children, 218. Under two years of age, 133. Natives, 280; Foreign, 123; Colored, 12.

Among the causes of death, we notice—Apoplexy, 15; infantile convulsions, 26; croup, 8; diphtheria, 11; scarlet fever, 28; typhus and typhoid fevers, 8; cholera infantum, 0; cholera morbus, 0; consumption, 73; small-pox, 11; dropsy of head, 19; infantile marasmus, 16; diarrhœa and dysentery, 5; inflammation of brain, 7; of bowels, 10; of lungs, 18; bronchitis, 3; congestion of brain, 9; of lungs, 0; erysipelas, 5; hooping-cough, 4; measles, 5: 210 deaths occurred from acute disease, and 29 from violent causes.

Population of New York, by the census of 1860, 814,277. Mortality, 1 in 2021.

Of Boston, for the week ending Feb. 15, 1862.

Deaths—Males, 39; females, 32. Total, 71. Natives, 53; Foreign, 14.

Among the causes of death, we notice—Phthisis, 11; cholera infantum, 0; croup, 4; scarlet fever, 3; pneumonia, 5; variola, 0; dysentery, 0; typhus fever, 1; diphtheria, 0; hooping-cough, 0; convulsions, 1.

Population of Boston, 1860, 177,902. Average corrected to increased population. 82·17.

Of Sacramento, Cal., for the year 1861.

Deaths—Males, 268; females, 93. Total, 361. Natives, 241; Foreign, 120. Under one year of age, 72.

The total average of mortality for the eleven years past is 384·7.

Deaths in December, 1861—Males, 27; females, 11. Total, 38. Under one year, 5. Natives, 27; Foreign, 11.

Dr. Logan remarks "that thus far the inundation appears to have exercised a beneficial influence upon the health of the city."

Communications Received.

Connecticut—E. G. Sumner; Drs. G. A. Moody, F. A. Hart, each with encl.; J. G. White; Drs. J. H. Hoyt, D. Mead, J. Prior, W. H. Trowbridge, each with encl. *Illinois*—E. A. D'Arcy. *Indiana*—Dr. J. J. Drummond, with encl. *Iowa*—Dr. P. Reeder, with encl. *Maine*—Dr. C. F. Pudor, with encl.; A. W. Currier. *Maryland*—Dr. J. C. S. Monkur, with encl.; G. M. Upshur. *Massachusetts*—Dr. D. B. Whittier, with encl.; W. H. Fraser, E B. Moore, J. J. Wetherbee, J. Roberts, J. M. Gibbons. *Michigan*—Drs. J. M. Piersoll, N. B. Hewitt, Loree, with encl.; E. B. Ware; Drs. A. Van Tyne, F. Parsons, with encl. *New Hampshire*—O. A. Woodbury. *New Jersey*—Drs. W. S. Courson, J. B. Stretch, with encl.; A. E. Budd; Drs. A. W. Rogers, O. H. Taylor, each with encl. *New York*—P. H. Clark, S. Winne, O. C. Gibbs, W. Fricke, Drs. J. Swinburne, G. N. Dox, E. R. Maxson, C. B. Howe, J. D. Button, C. L. George, T. S. Brinkerhoff, G. Coon, O. C. Clark, D. Colvin, J. E. Smith, N. Peck, Patterson, Robeson & Son, Boyce, Van Auden, Tober, Lynch, S. C. Cooley, each with encl.; Geo. K. Smith, J. Foran, J. S. Monell, W. A. Townsend, with encl.; D. F. Vanaken, Drs. H. F. Bennet, J. M. Rippey, each with encl.; C. M. Tuttle, Drs. Hull, Fourgang, I. P. H. Denrig, H. T. Spencer, A. M. Marsh, D. Chase, C. C. Parsons, J. F. Whitbeck, J. A. Beigler, Sumner & White, L. C. Dolley, J. A. Reichenback, E. W. Armstrong, L. Keichling, McGee & Caldwell, D. S. Fasseth, I. H. Helmer, C. Vail, T. B. Collins, Rapalge, Auner, H. H. Dean, Bradley, J. A. West, D. Felgenmacher, each with encl.; S. V. Parker, J. Homberger. *Ohio*—J. Baggs, C. A. Hartman, D. W. Raymond, A. S. T. K. Williams, J. F. Capell, D. B. Walker, Dr. W. Culbertson, with encl. *Pennsylvania*—B. F. Harry, Drs. W. H. Meyers, S. L. Strain, each with encl.; A. A. Ziegenfuss, R. P. Greenleaf. *Vermont*—C. L Allen. *Wisconsin*—A. E. Smith.

Office Payments.—Drs. Hall, Knox, Linton, Brinkle, Pearsall, Cady.

TO MEDICAL STUDENTS.

The undersigned would respectfully inform Medical Students that he proposes to receive a class, not exceeding *twelve*, for purposes of instruction. Daily recitations will be held, and lectures given upon all the more immediately practical departments of Medicine. Students who have attended one course of lectures, and are preparing for graduation, will be preferred. Access will be given to a good library, and all the journals of the country are regularly received. He is situated in a pleasant village, with romantic surroundings. Those who wish to avail themselves of this opportunity will address the undersigned at once.

Terms of instruction, $1 00 per week. Board, $2 50.

Please Address O. C. GIBBS, M.D., *Frewsburg, N.Y.*

WATER:

Its History, Characteristics, Hygienic and Therapeutic uses.

BY SAMUEL W. FRANCIS, M.D., OF NEW YORK.

CONTENTS.—Religious History. Mythological History. Profane History. In Therapeutics. In Anatomy and Physiology. Water as a Drink. In Chemistry. In Natural Philosophy. In Geology. In Botany. Virtues of Water. Mineral Waters. Inhabitants of Water.

A learned and scientific essay, elaborate in research and complete in detail, it will richly repay perusal.

For sale at the Office of the REPORTER, N. E. cor. 7th and Sansom Streets, in this city; and in New York, by S. S. & W. WOOD, 389 Broadway.

PRICE FIFTEEN CENTS.

The Book will be sent to any address, postage paid, on receipt of price.

H. SEBALD,

DESIGNER AND ENGRAVER

ON

WOOD.

No. 43 SOUTH THIRD STREET,

PHILADELPHIA.

Feb. 1.—1y

28*

Medical Directory.

PENNSYLVANIA HOSPITAL, Eighth, below Spruce. Entrance on Eighth Street.

Medical Clinic on Wednesdays and Saturdays, at 10 A.M., by Dr. Gerhard.

Surgical do., at 11 A.M., by Dr. Geo. W. Norris.

MEDICAL LIBRARY OF THE PENNSYLVANIA HOSPITAL.—Open on Wednesdays and Saturdays.

PHILADELPHIA HOSPITAL.—Medical Clinic on Wednesdays and Saturdays, at 9½ A.M., by Dr. Da Costa.

Surgical Clinic on Wednesdays and Saturdays, at 10½ A.M., by Dr. S. D. Gross.

WILLS HOSPITAL FOR THE EYE AND LIMB.—Clinics, Wednesdays and Saturdays, at 11 A.M., by Dr. William Hunt.

HOWARD HOSPITAL, Lombard Street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P.M. Monday and Thursday—Dr. Turnbull, at 1 P.M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P.M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Judson, at 1; and Dr. Morehouse, at 5 P.M. Monday and Thursday—Dr. Meigs, at 5 P.M. Tuesday and Friday—Dr. Atkinson, at 3½ P.M.

JEFFERSON MEDICAL COLLEGE, Tenth, above Walnut.

Medical Clinic on Wednesdays and Saturdays, at 12 M., by Dr. R. Dunglison.

Surgical do., at 1 P.M., by Dr. Pancoast.

UNIVERSITY OF PENNSYLVANIA, Ninth, below Market.

Surgical Clinic on Wednesdays and Saturdays, at 1 P.M., by Prof. Smith.

Dispensary Service every afternoon at 3 P.M., by Drs. Dunton and Hodge.

PENNSYLVANIA COLLEGE OF DENTAL SURGERY, 528 Arch Street.—Clinical Lectures daily, (except Sunday,) from 2 to 4 P.M., by Dr. Goodwillie.

PHILADELPHIA LYING-IN CHARITY.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning, at 9 o'clock, by Dr. Edwin Scholfield.

LONG ISLAND COLLEGE HOSPITAL,

BROOKLYN, N. Y.

SESSION FOR 1862.

☞ *The Regular Course of Lectures will commence on the 19th of March and continue till the middle of July.*

BOARD OF REGENTS.

HON. SAMUEL SLOAN, PRESIDENT.
GUSTAVUS A. BRETT, ESQ., SECRETARY.

COUNCIL.

T. L. MASON, M.D. C. L. MITCHELL, M.D.
WM. H. DUDLEY, M.D. J. H. HENRY, M.D.

PROFESSORS.

Austin Flint, M.D., Prof. of Practical Medicine and Pathology.
Frank H. Hamilton, M.D., Prof. of Surgery.
James D. Trask, M.D., Prof. of Obstetrics and Diseases of Women and Children.
R. Ogden Doremus, M.D., Prof. of Chemistry and Toxicology.
Joseph C. Hutchison, M.D., Prof. of Operative Surgery and Surgical Anatomy.
John C. Dalton, Jr., M.D., Prof. of Physiology and Microscopic Anatomy.
Dewitt C. Enos, M.D., Prof. of General and Descriptive Anatomy.
Edwin N. Chapman, M.D., Prof. of Therapeutics and Materia Medica, and Clinical Prof. of Midwifery.

Geo. K. Smith, M.D., Demonstrator of Anatomy.
A. W. Wilkinson, M.D., Assistant to Prof. of Chemistry.
A. Duncan Willson, M.D., Prosector to Prof. of Operative Surgery.

The fees for a full course	$100
The Matriculation fee	5
The fee of the Demonstrator of Anatomy	5
The Graduation fee	25

The Hospital Tickets are gratuitous.

Good board with lodging, etc., may be obtained in the immediate vicinity of the College, for from $3 to $5 per week.

Letters addressed to the Members of the Council will receive attention. 274—282

MEDICAL WORKS

PUBLISHED BY

J. B. LIPPINCOTT & CO.,

PHILADELPHIA.

Will be sent by mail, postpaid, on receipt of the price by the Publishers.

MACLEOD'S
SURGERY OF THE CRIMEAN WAR.

NOTES ON THE SURGERY OF THE WAR IN THE CRIMEA, with Remarks on the Treatment of Gunshot Wounds. By GEORGE H. B. MACLEOD, M.D., F.R.C.S., Surgeon to the General Hospital in Camp before Sebastopol, Lecturer on Military Surgery in Anderson's University, Glasgow, etc. etc. One vol. 12mo. $1.50.

SUMMARY OF CONTENTS.

Chap. I.—The History and Physical Characters of the Crimea. The Changes of the Seasons during the occupation by the Allies. The Natives, and their Diseases.

Chap. II.—Drainage of the Camp. Water Supply. Latrines. Food. Cooking. Fuel. Clothing. Housing. Duty. Effect of all these combined on the health and diseases of the soldiers. Hospitals. Distribution of the Sick. Nursing, male and female. Transport.

Chap. III.—The Campaign in Bulgaria, and its effects on the subsequent health of the troops. The Diseases which appeared there, and during the Flank March, as well as afterward in the Camp before Sebastopol.

Chap. IV.—Distinction between Surgery as practiced in the Army and Civil Life. Soldiers as Patients, and the character of the Injuries to which they are liable. Some peculiarities in the wounds and injuries seen during the war.

Chap. V.—The "Peculiarities" of Gunshot Wounds, and their General Treatment.

Chap. VI.—The use of Chloroform in the Crimea. Primary and Secondary Hemorrhage from Gunshot Wounds. Tetanus. Gangrene. Erysipelas. Frost-bite.

Chap. VII.—Injuries of the Head.

Chap. VIII.—Wounds of the Face and Chest.

Chap. IX.—Gunshot Wounds of the Abdomen and Bladder.

Chap. X.—Compound Fracture of the Extremities.

Chap. XI.—Gunshot Wounds of Joints. Excision of Joints, etc.

Chap. XII.—Amputation.

FROM SURGEON-GENERAL HENRY H. SMITH.

GENTLEMEN:—I thank you for the copy of Macleod's Surgery as published by you.

With the English Edition I am very familiar, and regard it as one of the best of the modern works on Military Surgery.

Its republication at the present moment is a valuable contribution for our Army Surgeons, all of whom should have it.

Very truly, yours,

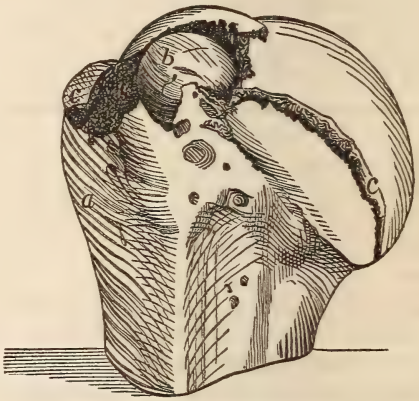
HENRY H. SMITH.

MESSRS. J. B. LIPPINCOTT & CO.
Philadelphia, Dec. 3, 1861.

GUTHRIE'S
SURGERY OF WAR.

COMMENTARIES ON THE SURGERY OF THE WAR IN PORTUGAL, SPAIN, FRANCE, AND THE NETHERLANDS,

From the battle of Roliça, in 1808, to that of Waterloo, in 1815, with additions relating to those in the CRIMEA, in 1854–55; showing the improvements made during and since that period in the great art and science of surgery on all the subjects to which they relate. By G. J. GUTHRIE, F.R.S. One vol. 12mo. [Nearly ready.]



a. The head of the humerus sawn off below the tuberosities.
b. The ball.
c c. Fractures of the head of the bone.

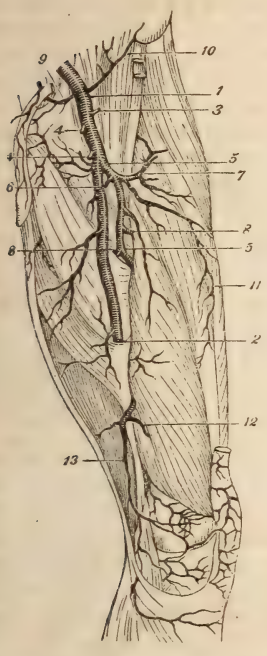
[FROM THE PREFACE TO THE SIXTH LONDON EDITION.]

"The rapid sale of the fifth, and the demand for a sixth edition of this work, enable me to say that the precepts inculcated in it have been fully borne out and confirmed by the practice of the Surgeons of the army in the Crimea in almost every particular. * * * They have performed operations of the greatest importance at my suggestion, that had not been done before, with a judgment and ability beyond all praise; and they have modified others to the great advantage of those who may hereafter suffer from similar injuries.

* * * * * * * *

"The precepts laid down are the result of the experience acquired in the war in the Peninsula, from the first battle of Roliça, in 1808, to the last in Belgium, of Waterloo, in 1815, which altered, nay, overturned, nearly all those which existed previously to that period, on all the points to which they relate. Points as essential in the surgery of domestic as in military life. They have been the means of saving the lives, and of relieving, if not even of preventing, the miseries of thousands of our fellow-creatures throughout the civilized world."

Agnew's Practical Anatomy. A new arrangement of the London Dissector, with numerous modifications and additions: containing a concise description of the Muscles, Nerves, Blood-vessels, Viscera, and Ligaments of the Human Body as they appear on Dissection. With Illustrations. By D. Hayes Agnew, M.D., Lecturer on Anatomy, and Surgeon to the Philadelphia Hospital, (Blockey.) One vol. 12mo. $1.00.



This work has been adapted to the use of the American student by altering the arrangement and changing the nomenclature in many cases; by adding the ligamentous system; by illustrations; by erasing what was unnecessary, and presenting the whole as nearly as possible in the topographical order. The work, as now published in this American edition, has been prepared with a single eye to the faithful economy of the student's time.

Beck's Elements of Medical Jurisprudence. Eleventh edition. By Theodric Romeyn Beck, M.D., LL.D., Professor of Materia Medica in the Albany Medical College, etc.; and John B. Beck, M.D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the City of New York, etc. With notes by an association of the friends of Drs. Beck. The whole revised by C. R. Gilman, M.D., Professor of Medical Jurisprudence in the College of Physicians and Surgeons of New York. Two vols. 8vo. $10.00.

Beck's Medical Jurisprudence has so fully established its character as a standard on that subject, by its numerous editions, both in England and this country, that it is unnecessary to speak of its merits. Mr. Warren, the distinguished English legal writer, in his introduction to Law Studies, says of it:—

"The best work, by far, upon the subject of forensic medicine, of all those which have come under the author's notice, is the Medical Jurisprudence of Dr. Beck, which is not only an instructive, but a highly interesting work."

The eleventh American edition, which you have afforded me the opportunity of examining, is evidently a very great improvement upon all previous editions. The large amount of new matter accumulated by Dr. T. R. Beck before his death, has been judiciously introduced by his able professional friends, to whom it was entrusted, and has rendered the work as complete as it is invaluable.

Very truly, yours,

GEO. SHARSWOOD.

Louisville, Ky, Dec. 24, 1859.

I am glad to have the opportunity to read the last edition (1860) of Beck's Medical Jurisprudence. This is the best work on the subject of general medical jurisprudence ever published; and the labors of Dr. Gilman have contributed much to the value of the present edition.

Very respectfully,

HENRY PIRTLE.

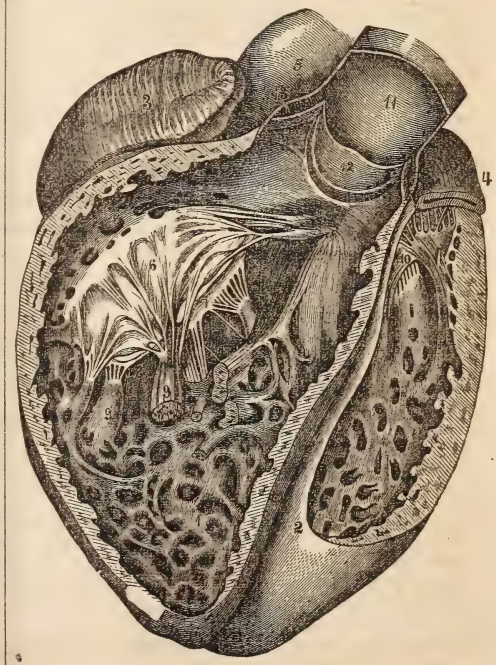
Roslyn, N. Y., Jan. 13, 1860.

I am well acquainted with the great merits of Dr. Beck's work, which I have been in the habit of considering as the only real cyclopedia of medical jurisprudence in our language. . . . . It is so invaluable both to law and medical practitioners, that I cannot conceive of any work extant which will, in all particulars, furnish such orthodox opinions.

Respectfully yours,

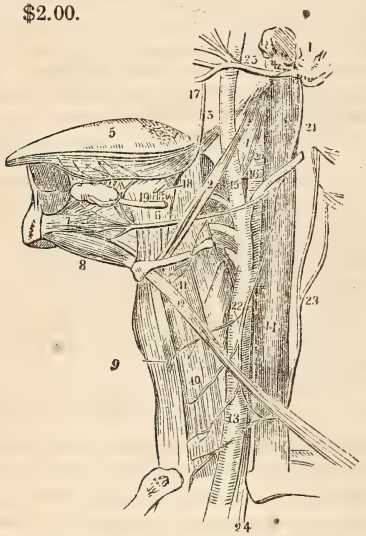
JNO. ORDRONAUX.

Leidy's Human Anatomy: An Elementary Text-book for Students. By Joseph Leidy, M.D., Professor of Anatomy in the University of Pennsylvania. Elegantly illustrated from numerous original drawings. One vol. 8vo. $5.00.



View of the Heart, with the anterior portions of the ventricle removed.

Horner's United States Dissector. The United States Dissector; or, Lessons in Practical Anatomy. By WILLIAM E. HORNER, M.D., late Professor of Anatomy in the University of Pennsylvania. Fifth edition, carefully revised, and entirely remodeled. By HENRY H. SMITH, M.D., Fellow of the College of Physicians of Philadelphia, etc. With one hundred and seventy-seven new illustrations. One vol. demi 8vo. $2.00.



Nerves of the neck and tongue.

This is a new and revised edition of one of the most popular works on dissection which has ever been published in this country. The editor has carefully revised the text, modified its order, added an entire set of new illustrations, and introduced such recent subjects as the progress of science rendered necessary.

Drake's Diseases of the North American Valley: A Systematic Treatise, Historical, Etiological, and Practical, on the principal diseases of the interior valley of North America, as they appear in the Caucasian, African, Indian, and Esquimaux varieties of its population. By DANIEL DRAKE, M.D. Edited by S. HANBURY SMITH, M.D., formerly Professor of the Theory and Practice of Medicine in Starling Medical College, Ohio; and FRANCIS G. SMITH, M.D., Professor of the Institutes of Medicine in the medical department of Pennsylvania College, Philadelphia. One vol. 8vo. Sheep, $5.00.

Dr. Drake's great reputation, and his extensive practice in the Western country, gives great value and decisive authority to this treatise on the diseases prevalent in the valley of the Mississippi. While the work is of great interest to the general practitioner in other parts of the country, to the Western and Southwestern members of the medical profession it will hereafter be considered an indispensable book of reference and instruction.

Eberle and Mitchell on Children. A Treatise on the Diseases and Physical Education of Children. By JOHN EBERLE, M.D., late Professor of the Theory and Practice of Medicine in Transylvania University, etc. etc. Fourth edition, with notes and large additions by THOMAS D. MITCHELL, A.M., M.D., Professor of the Theory and Practice of Medicine in the Philadelphia College of Medicine, late Professor of Materia Medica and Therapeutics in Transylvania University, Lecturer on Obstetrics and the Diseases of Women and Children, etc. etc. One vol. 8vo. $2.50.

Dr. Eberle's "Treatise" has long been regarded by the medical profession as the best and most comprehensive work on the diseases and physical education of children. Dr. Mitchell has made considerable additions to it, introducing many topics not treated of by Dr. Eberle, every one of which he considers entitled to a place in a work on the diseases of the infant race. The large addition of matter thus made to the work has proved to be both acceptable and useful.

Gerhard on the Chest. The Diagnosis, Pathology, and Treatment of Diseases of the Chest. By W. H. GERHARD, M.D., one of the Physicians to the Pennsylvania Hospital, Fellow of the College of Physicians of Philadelphia, Member of the American Philosophical Society, etc. Fourth edition, revised and enlarged. One vol. 8vo. Cloth, $275; sheep, $3.00.

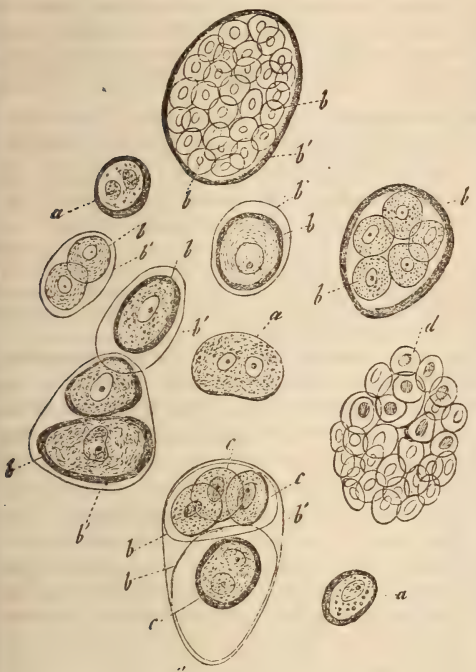
This is the work of more than twenty years. . . . . During the sale of the different editions, new matter has been incorporated, the result of experience and observation, or drawn from the valuable contributions of other writers. To this latest edition about one hundred pages of new matter have been added, bringing the work up to the present knowledge of diseases of the Chest. With the advantage of such constant revision, the volume takes rank among the most valuable medical standards.—*North American.*

Metcalfe on Caloric. Caloric: Its mechanical, chemical, and vital agencies in the phenomena of nature. By SAMUEL L. METCALFE, M.D., of Transylvania University. Two vols. 8vo. $5.00.

It bears the unquestionable stamp of genius, and carries with it, at the same time, evidences of learning various and extensive, and of such laborious research as can only be successfully achieved by minds of the noblest order in pursuit of sacred truth. . . . . It is a work, the like of which only comes from the press at rare and distant intervals—a work, indeed, of sublime scope, and, rightly taken, of the noblest tendency. . . . It is the spontaneous effusion of a gifted mind, brimful of knowledge, and tinctured itself with the hallowed fire of poetry.—*London Med. Gaz.*

The work resembles the beautiful system of nature which it is designed to illustrate. The longer we examine it, the more beauties do we find in it. The author, we believe, is fairly entitled to the credit of being the first philosopher who has discovered a key whereby to unlock all her secret cabinets of wisdom and wealth.—*N. Y. Jour. of Medicine.*

Kolliker's Manual of Human Microscopical Anatomy. By A. Kolliker, Professor of Anatomy and Physiology in Wurzburg. Translated by Geo. Bush, F.R.S., and Thomas Huxley, F.R.S. Edited, with notes and additions, by J. Da Costa, M.D. Illustrated by 313 engravings on wood. One vol. 8vo. $3.75.



Cartilage cells from a fibrous, velvety, articular cartilage of the condyle of the femur of man, magnified 350 diameters.

It would be useless for us to attempt a review of this work, for the text is so fully illustrated by engravings, and is so intimately associated with them, that we cannot extract any part as a sample of the style, without weakening its force, for the want of its accompanying illustration. The book must be read and studied before an adequate idea can be formed of its value and excellence. The book comes from such high authority, and is indorsed by such competent judges, as to make it at once indispensable to the student of microscopic anatomy. We hope it will have an extensive circulation.—*Western Lancet.*

The reputation of Professor Kolliker, acquired by his former and larger work on microscopical anatomy, will be enhanced by this text-book on Histology, for such it is destined to be pre-eminently. The text is fully illustrated by engravings, greatly adding to the value of the work, and accompanied by explicit explanations of the figures. We commend it to the profession, and to students especially, as worthy of their patronage.—*New York Medical Gazette.*

Storer's Criminal Abortion. Criminal Abortion in America. By H. R. Storer, M.D. One vol. 8vo. $1.00.

Mitchell's Materia Medica and Therapeutics. Materia Medica and Therapeutics, with ample illustrations of practice in all the departments of medical science, and copious notices of toxicology; the whole adapted to the wants of medical pupils and practitioners. By Thomas D. Mitchell, M.D., Professor of the Theory and Practice of Medicine in the Philadelphia College of Medicine, etc. etc. Second edition. One vol. 8vo. $4.00.

We take much pleasure in noticing this able work of Dr. Mitchell, and can assure our readers it is one of the best works on materia medica and therapeutics that has been published. It is written in a style that interests and instructs at the same time.—*Boston Med. and Surg. Journal.*

This new work, upon an old subject, will be found to embody a variety and amount of practical information in this department which are not to be met with in any one of the numerous treatises on materia medica or therapeutics, or both, with which the profession has been favored. The ample illustrations of practice in all the departments of medical science, with the very ample notices of toxicology, etc., render it a valuable book for students, and also adapt it for reference by practitioners, both of which purposes are subserved by its alphabetical arrangement.—*N. Y. Medical Gazette.*

Thomson's Domestic Medicine: A Dictionary of Domestic Medicine and Household Surgery. By Spencer Thomson, M.D., L.B.C.S. Edinb. First American, from the last London edition. Revised, with additions, by Henry H. Smith, M.D., Professor of Surgery in the Pennsylvania University. One vol. 12mo. $1.50.

This work has received the highest encomiums from the critical journals of the day. "Many a useful life," remarks a British periodical, "might have been spared, and many an insidious disease checked in the bud, had such works as that of Dr. Thomson been earlier in existence. To the traveler by sea or by land, to the settler and the emigrant, far from medical aid, it must prove invaluable."

The work has been carefully adapted to the American climate and habits by Dr. Henry H. Smith, of Philadelphia, whose contributions to the volume have greatly added to its value It is the standard book of domestic medicine. The arrangement of the subjects in alphabetical order renders it extremely convenient for prompt reference and consultation.

Bernard and Robin on the Blood.—Notes of M. Bernard's Lectures on the Blood, with an Appendix, giving an account of the latest studies of M. Robin, the celebrated microscopist. By Walter Franklin Atlee, M.D. One vol. 12mo. Cloth, 75 cents.

Memoranda Medica; or, Note-book of Medical Principles. By Henry Hartshorne, M.D., Professor of the Theory and Practice of Medicine in the Medical Department of Pennsylvania College. One vol. 12mo.

Longmore's Gunshot Wounds. A Treatise on Gunshot Wounds. By T. Longmore, Deputy Instructor of Hospitals, Prof. of Military Surgery at Fort Pitt, Chatham. In two Parts. One vol. 12mo.

Part I. Gunshot Wounds in General.

Part II. Gunshot Wounds in Special Regions of the Body.

Florence Nightingale's Notes on Hospitals. Notes on Hospitals: being Papers read before the National Association for the Promotion of Social Science, at Liverpool, in October, 1858, with evidence given to the Royal Commissioners on the state of the Army in 1857. By Florence Nightingale.

Acton on the Urinary Organs. A Practical Treatise on Diseases of the Urinary and Generative Organs in both Sexes. Part I. — Non-specific Disease. Part II.—Syphilis. By William Acton, late Surgeon to the Islington Dispensary, and formerly Externe at the Female Veneral Hospital, Paris. From the second London edition. With additional Illustrations and Colored Plates. One vol. 8vo. $4.00.

This work is intended to be used by the student as a complete text-book on the subjects of which it treats; and, at the same time, to supply data for the surgeon desirous of learning the most modern treatment of the protean forms of Syphilis, as well as materially to assist the practitioner who, in the witness-box, is liable to be cross-examined on many of the most intricate questions of generation, absorption, or contagion.

Campbell's Secretory and Excito-Secretory System. Essays on the Secretory and the Excito-Secretory System of Nerves, in their relations to Physiology and Pathology. Comprising, I. A new classification of febrile diseases. II. An exposition of the ganglionic pathology of all continued fevers, as illustrated in typhus and typhoid fever. III. The Prize Essay on the excito-secretory system of nerves in its relations to physiology and pathology. IV. A letter to Dr. Marshall Hall, of London, claiming priority in the discovery and naming of the excito-secretory system of nerves. By Henry Fraser Campbell, A.M., M.D., one of the Vice-Presidents of the American Medical Association, and Professor of Anatomy in the Medical College of Georgia at Augusta. One vol. 8vo. $1.25.

Ricord on Venereal Diseases. A Practical Treatise on Venereal Diseases; or, Critical and Experimental Researches on Inoculation applied to the study of these affections: With a therapeutical summary and special formulary. By Ph. Ricord, M.D., Surgeon of the Venereal Hospital of Paris, Clinical Professor of Special Pathology. Translated from the French by A. Sidney Doane, A.M., M.D. Thirteenth edition. One vol. 8vo. $1.50.

M. Ricord's reputation as a lecturer and practitioner in Paris is of the highest order. He is distinguished for his sound and philosophical views upon a disease which carries terror wherever it appears, and whose consequences are often felt by the innocent as well as the guilty. The first part of the book partakes of the philosophical spirit of its author, while in the pages devoted to the treatment of syphilis, M. Ricord has spread out the results of thousands of cases coming under his observation.

Warrington's Obstetrics. The Obstetric Catechism: containing three thousand two hundred and forty-seven questions and answers on obstetrics proper. By Joseph Warrington, M.D. 150 illustrations. One vol. 12mo. $1.50.

An excellent compend of obstetric science and practice, in a very convenient form for purposes of instruction. The author is a very eminent professor, and the work was intended for the use of his own pupils, and students of medicine generally. The illustrations of the work are very numerous, and of the most useful kind tothe student.

Simpson's Obstetrics. The Obstetric Memoirs and Contributions of James Y. Simpson, M.D., F.R.S, Professor of Midwifery in the University of Edinburgh, etc. etc. Edited by W. O. Priestly, M.D., of Edinburgh, formerly Vice-President of the Parisian Medical Society; and Horatio R. Storer, M.D., of Boston, U. S., one of the Physicians to the Boston Lying-in Hospital, Member of the Medico-Chirurgical and Obstetric Societies of Edinburgh, etc. Two vols. 8vo. Cloth, $6.00; sheep, $7.50.

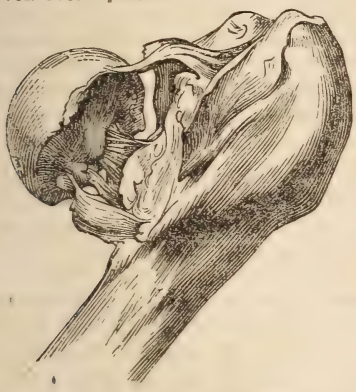
The object of the editors has been to present these Memoirs to the medical profession in a form readily available, so as to facilitate the study of any special inquiry, an object of no slight importance to most medical men engaged in active practice. The papers have appeared at different times in journals some of which are out of print, were inaccessible to the medical public, although anxiously sought for. They are the result of an almost unlimited practical knowledge and experience, and do honor to the literature of the profession.

Mitchell's Essays. Five Essays. By John Kearsley Mitchell, M.D., late Professor of the Practice of Medicine in Jefferson Medical College of Philadelphia, etc. etc. 1. Essay upon the cryptogamous origin of malarious and epidemic fevers. 2. An essay upon animal magnetism, or vital induction. 3. On the penetrativeness of fluids. 4. On the penetrativeness of gases. 5. On a new practice in acute and chronic rheumatism. Edited by S. Weir Mitchell, M.D. One vol. 12mo. $1.25.

The friends of the late Dr. Mitchell, which designation included all who knew him, and the members of the medical profession throughout the land, will welcome this volume as a tribute to his memory, and prize it for its intrinsic value—*North American.*

Reeves's Enteric Fever. A Practical Treatise on Enteric Fever. Being an analysis of 130 consecutive cases, derived from private practice, and embracing a partial history of the disease in Virginia. By JAMES E. REEVES, M.D. One vol. 12mo. $1.00.

Malgaigne's Treatise on Fractures. A Treatise on Fractures. By Professor J. F. MALGAIGNE, of Paris. With over one hundred Illustrations. Translated from the French, with notes and additions, by JOHN H. PACKARD, M.D. One vol. 8vo. $4.00.



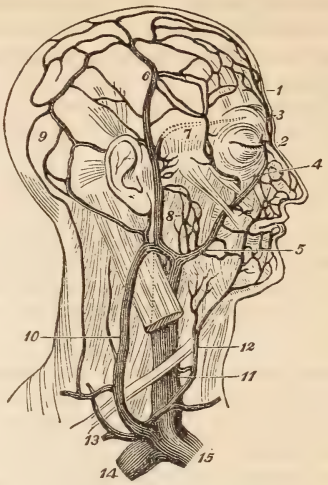
Old Inter-Capsular Fracture, with considerable shortening.

Malgaigne's Treatise has enjoyed so wide a circulation and such well-deserved renown, that we must own to a feeling of surprise at learning that before the appearance of the present work no attempt has been made to present so popular an author in an English dress. The present book, a contribution to our literature from America, is the work of a gentleman whose name is not otherwise known to us, and is one which we can conscientiously pronounce very valuable. . . A very useful book indeed, and one which we hope will have an extensive circulation.—*British and Foreign Med.-Chir. Review.*

Must be regarded as a monument, conspicuous and to be admired, even among the noble monuments of the medical literature of his [the author's] country. As a solid, complete, substantial, highly-finished work, we know of none that is its superior; it can, with justice, be regarded as a model in scientific literature.— *North American Med.-Chir. Review.*

It affords us sincere pleasure to be able to welcome the appearance. in an English dress, of this valuable treatise. The annotations which Dr. Packard has appended to it are numerous, and appear to us to be of much practical value, adapting, as they do, the treatment of fractures to the generally received and most approved American methods. —*Journal of the Medical Sciences.*

Richardson's Anatomy. Elements of Human Anatomy: General, Descriptive, and Practical. With over 400 illustrations. By T. G. RICHARDSON, M.D., Demonstrator of Anatomy in the Medical Department of the University of Louisville, and one of the attending Surgeons to the Louisville Marine Hospital. One vol. 8vo. $3.00.



Veins of the head and neck.

It is an amply sufficient text-book, and the preceptor may confidently place it in the hands of his pupils as such. The wood-cuts are numerous and elegant, and serve admirably to illustrate the text —*New Jersey Medical Reporter.*

Our author claims for his work the improvement of having general, descriptive, and practical anatomy in the same volume; the arrangement of the section devoted to practical anatomy so as to secure the greatest possible economy of material; and lastly, in the substitution of English for Latin terms, wherever it appeared to be practicable and judicious.—*N. Y. Medical Times.*

Wood's Lectures and Addresses. Introductory Lectures and Addresses on Medical Subjects. Delivered chiefly before the medical classes of the University of Pennsylvania. By GEO. B. WOOD, M.D., LL.D., President of the American Philosophical Society, Professor of the Theory and Practice of Medicine, and of Clinical Medicine, in the University of Pennsylvania, etc. etc. One vol. 8vo. $1.75.

Wood's Practice of Medicine. A Treatise on the Practice of Medicine. By. GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania. Fourth edition, improved. Two vols. 8vo. $7.00.

This is far the best work on the practice of medicine in the English language, and we recommend it strongly to the attention of our readers. It is much fuller than Dr. Watson's admirable lectures, while it is less lengthy than the Library or Cyclopædia of Medicine; and it has this further advantage over the two last-named works—that while they are far behind, it is a fair reflex of the actual state of knowledge. —*London Medical Times and Gazette.*

Wood's Therapeutics. A Treatise on Therapeutics and Pharmacology, or Materia Medica. By GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, Senior Physician of the Pennsylvania Hospital, one of the authors of the United States Dispensatory, author of a Treatise on the Practice of Medicine, etc. etc. Two vols. 8vo. $7.00.

In his preface Dr. Wood gives the following account of his opportunities for acquiring knowledge and forming just views on the subjects embraced in this treatise:—

"Almost from the commencement of his professional life the author has given peculiar attention to this branch of medical knowledge. For a period of about thirty years, before 1850, when he was transferred to the professorship which he now occupies, he was engaged in teaching materia medica, first as a private lecturer, and afterwards successively in the Philadelphia College of Pharmacy and the University of Pennsylvania. His position, therefore, rendered constant investigations into the properties, effects, and uses of remedies necessary in order at once to do justice to his pupils and avoid discredit to himself. Most of those whom he now addresses are probably aware that he is one of the authors of the United States Dispensatory. To provide the original materials for his portion of that work, and to gather from time to time the knowledge requisite for its maintenance upon a level with the progressive condition of medical science, unremitting diligence was essential in prosecuting inquiry and investigation in the whole field of pharmacology. In addition to the ordinary professional opportunities, he has for about twenty years held the office of one of the physicians of the Pennsylvania Hospital, which has given him facilities for testing the value of remedies greater than any amount of private practice could afford. Few persons have had greater advantages or stronger inducements than himself for acquiring the knowledge requisite for the production of a work of this kind."

Wood and Bache's Dispensatory. The Dispensatory of the United States: consisting of

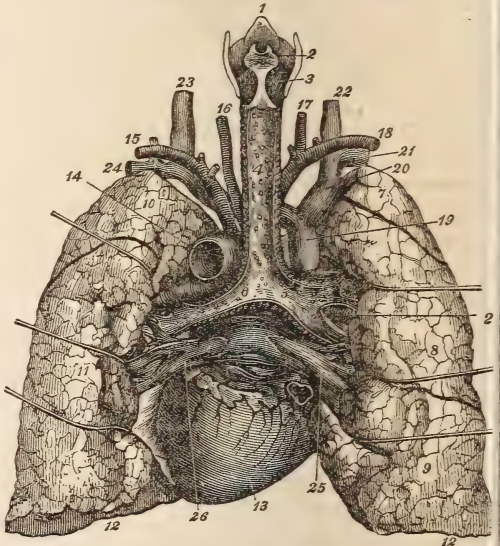
1. A treatise on Materia Medica, or the natural, commercial, chemical, and medical history of the substances employed in medicine, and recognized by the Pharmacopœias of the United States and Great Britain;

2. A treatise on Pharmacy: comprising an account of the preparations directed by the American and British Pharmacopœias, and designed especially to illustrate the Pharmacopœia of the United States; and

3. A copious Appendix: embracing an account of all substances not contained in the official catalogues, which are used in medicine, or have any interest for the physician or apothecary. By GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, etc. etc.; and FRANKLIN BACHE, M.D., Professor of Chemistry in the Jefferson Medical College of Philadelphia, etc. etc. Eleventh edition, much enlarged. One vol. 8vo. $6.00.

This work has been thoroughly revised, with many alterations and additions, so as to bring it fully up to the level of the present state of materia medica and pharmacy. It embraces the substance of the recently revised United States and British Pharmacopœias, with a commentary on all that is new in those publications. Nothing, indeed, has been omitted in the revision which could render it worthy of the confidence it has enjoyed.

Morton's Human Anatomy. An Illustrated System of Human Anatomy, Special, General, and Microscopic. By SAMUEL GEORGE MORTON, M.D., author of Crania Americana, Crania Ægyptiaca, etc. With three hundred and ninty-one engravings on wood. One vol. 8vo. $4.50.



Posterior View of the Lungs, from Bourgery.

Dr. Morton's reputation as a man of profound science, great ability, and untiring energy, has been recognized not only in America, but in Europe, for the last twenty years. His "Crania Americana" and "Crania Ægyptiaca" have given him a world-wide fame. His anatomy is one of his latest works, and in it he has availed himself of all the interesting and important discoveries in anatomy which have been recently made. The work is published in splendid style, and the engravings were all executed under the careful supervision of the author.

J. B. LIPPINCOTT & CO., Publishers,
22 and 24 North Fourth St., Philadelphia.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, No. 281. PHILADELPHIA, MARCH 8, 1862. New Series, Vol. VII. No. 23.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By Louis Bauer, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

II.—*Deformities at the Knee-joint.*

Gentlemen:—The articulation to which we now invite your attention is very important. Its anatomical construction is complicated. It participates in almost all active positions the body may assume, bearing at the same time the superincumbent weight. It is but indifferently protected by soft tissues, and much exposed to traumatic injuries. The latter are the remote cause of by far the larger proportion of deformities occurring at the articulation. The form of distortion resulting from that source is simple flexion of the leg, Fig. 24, with more or less rotation of the tibia and eversion of the toes. Contraction of the biceps muscle is so constant a symptom of inflammations of and about the knee-joint that it may be set down as pathognomonic.

We need not repeat on this occasion all we have adduced in our general remarks on reflex actions, as co-ordinate symptoms in articular diseases; nevertheless, we desire to re-engage your interest on some very prominent points.

In all articular diseases, and more especially in those of the knee-joint, contractions of the flexor muscles of the leg form a prominent feature. They mostly appear soon after the commencement of the disease; but certainly they scarcely ever fail to set in during its progress. Inflammatory affections of the knee-joint, without reflex symptoms of this order, are very rare, and are, therefore, extreme exceptions.

Fig. 24.

The form in which these reflex symptoms appear is that of a tonic spasm; but, exceptionally, we have observed them to be of the clonic form. In the case of Ludwig Schindler, alluded to in our clinical lectures "on Contractions of the Knee-joint," they assumed the character of local convulsions, which kept the affected extremity, with few and short intermissions, in a most painful quiver. But even in tonic spasms, you may notice these convulsive oscillations in the contracted muscles whenever you disturb their status. And it is rather surprising that this prominent symptom of reflex action should have been, at so late a period, noticed, and received its proper physiological commentary; more especially as it is combined with a peculiar pain which has no direct connection with the progress or regress of the original disease in the joint. We are satisfied that the intensity of reflex symptoms acts more directly and more prejudicially on the constitution of the patient than the latter, and therefore it is of the

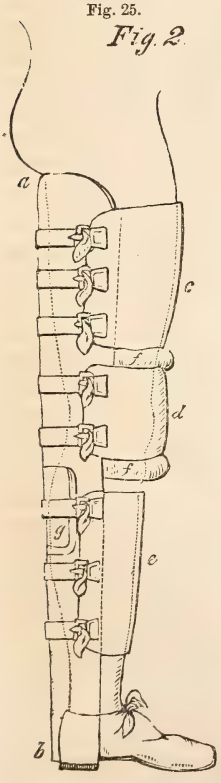
greatest practical importance to prevent them, or to simplify the disease by their removal.

Whenever you are called to a case of injury to the knee-joint, however trifling, it will be worth your while to pay due attention to this symptom; and if you find the slightest tendency to flexion, the attempted extension of the leg being painful, you had better at once employ extension and counteract the mischief at the very commencement. It would justly reflect upon the skill and knowledge of a surgeon, if he should allow the severe sufferings of his patient and the most unsightly deformity to grow under his eye, without resorting to remedies which are known to be efficacious.

If, however, the contraction of the hamstring muscles have become permanent, extension alone is rather hazardous, for it may give a new impetus to the active disease. Nay, more, we have seen the disease reproduced after a lapse of years, by indiscreetly employing undue extension. In these cases, the division of the contracted muscles, or their tendons, should precede the use of extension; and this alone will do more for the arrest of the disease than the balance of antiphlogistic or constitutional remedies.

Fig. 25.

Fig. 2.



Although it is not our province to enter upon the consideration of articular diseases, yet we cannot refrain from remarking that their treatment renders the employment of orthopædic measures imperative; not so much for the purpose of relieving the deformity, as to remove an element of the disease itself, which it is dangerous to disregard. Our success in the treatment of incipient and advanced joint diseases, we can ascribe to nothing else than to a due attention to this momentous symptom. Lately we employed a straight iron splint, Fig. 25, surrounding three-fourths of the extremity from behind, and extending from the tuber ischia down to the heel. In this, well padded, we bandaged the limb down in a straight position, and thus secured both rest and extension. But we feel persuaded that a simple cord and pulley and a proportionate weight is the gentler, and certainly the more reliable remedy.

The mode of applying them is simply as follows: Take a sufficiently long and wide strip of adhesive plaster—the better is that of Canton flannel because the stronger—and fasten it with a roller on either side of the leg, beginning about an inch below the joint and leaving a loop below the foot. Place a simple pulley at the foot of the bed; lay the leg of the patient upon a water-cushion, and fasten a string to the loop in the plaster, carrying it over the pulley, and attach the weight at the end. The body of the patient is mostly a sufficient counter-weight. If deemed necessary, apply counter-extension to the pelvis. It may also be advisable to protect the instep of the foot and the Achillis tendon from the pressure of the bandage by a small piece of adhesive plaster. You perceive that the limb is thus securely placed; the articulation exposed to your inspection and to the application of local remedies, the extension entirely under control, may be increased or diminished as the case may require. The water-bed secures cleanliness in case of suppuration, and the elastic extension and counter-extension enables you to move the articulation as often as is needful to prevent anchylosis.

Angular contraction of the Knee-Joint with Anchylosis.

If no attention be paid to the gradual contraction of the hamstring muscles, the affected articulation may recover by anchylosis and a permanent angular deformity.

Simple arthro-meningitis (synovitis) most usually terminates in *fibrous adhesion* of the articular faces, (false anchylosis.) According to the angle of contraction, different points of the articular faces may become thus agglutinated. In the right angle, for instance, the posterior circumference of the condyles rests on the tibia. The patella usually becomes adherent to the external condyle of the femur. These anatomical relations are naturally modified if the tibia be likewise rotated on its longitudinal axis and the toes everted, which is mostly the case.

Suppuration of the joint, or pyo-arthrosis, as it is called, does not necessarily lead to the other

form of anchylosis. We have, in such cases, freely opened the articulation and allowed the joint to fill up by granulation. Repeated gentle movements effectually prevented the consolidation of the inter-articular effusion. It remained, consequently, fibrous, and allowed a certain degree of mobility. This is a desirable result. If a straight position be likewise secured by proper local treatment, the extremity, for all practical purposes, is rendered useful.

Periostitis of the femur or tibia near the knee-joint generally gives rise to the formation of *osseous bands* (osteophytes) that cross the joint and cause perfect immobility. In as far as the articular faces have remained intact, this form of anchylosis is remediable.

Disease of the bones themselves most usually terminates in the establishment of a bony union, (true anchylosis.)

The treatment of spurious anchylosis of the knee-joint, complicated with angular contraction of the extremity, may be effected by *gradual and increased extension*, or by *forcibly breaking up* all the impediments to mobility.

Gradual extension, for the purpose of overcoming fibrous anchylosis and angular deformity, is an old surgical proceeding. Although repeatedly renewed and combined with friction, steaming, and numerous other local applications, it has never become popular among surgeons. From our introductory remarks you easily understand why such a method must be tedious and inefficacious; but, what is worse, it is extremely painful and dangerous. If but a moderate degree of extension be employed, its effect is naught; whereas severe extension is so excessively painful that no patient can bear it. There is not only danger of sloughing and extensive excoriations from pressure of the mechanical appliances, but the reaction upon the nervous system is frightful. Twenty-four hours' severe extension will more than suffice to throw the constitution of any patient out of its ordinary course. Next, there is the danger of reproducing the original disease from whence the anchylosis and deformity resulted. Our experience, therefore, is not of that description as to encourage the treatment of the like deformities by gradual extension.

The same want of success seems to have induced some surgeons to combine with progressive extension the tenotomy of the retracted tendons. As early as 1810, Michælis divided the skin and incised tendons and muscles in a case of scrofulous anchylosis of the knee, and reports, in the *Medico-Chirurgical Gazette* of Salzburg, of the same year,* that the result had been most satisfactory.

Dupuytren and Delpech performed tenotomy by a more accomplished method for the same object; but with Stromeyer's improvements of that operation, the treatment became more systematized.

M. H. Chase† and Lorinzer‡ still hold that the division of tendons is unnecessary; and the latter thinks that it materially protracts the recovery of the patient.

The biceps has been most frequently divided; after that the gracilis and semi-tendinosus muscles. Palasciano is of the opinion that the division of the quadriceps muscle is an indispensable preparatory measure in order to loosen the knee-cap. Bonnet favors the same opinion, but prefers a different operative plan.§

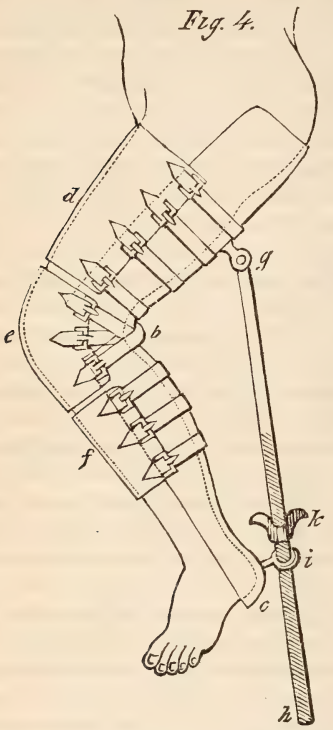
The apparatus devised for gradual extension of the knee-joint are very numerous, and some of them most ingeniously constructed, Fig. 26.‖ They have all, however, been superseded by the more simple, milder, and not less powerful pulley and weight. As a general method for the treatment of contractions at the knee-joint, the progressive extension even in connection with tenotomy is not commendable, because it is too tedious. But there are cases in which it may be considered indispensable; for instance, extensive scars in the neighborhood of the joint, the result of suppuration or burns. Here the knife can do but little, and extension therefore is opportune.

Forcible extension seems to be likewise an old and popular treatment. In every country, almost, some persons have been noted for their usefulness in setting bones and straightening joints. The shepherds and the schinderknechte of Germany made and make still quite a business of it, and some have acquired reputation and wealth thereby. Similar individuals act in the same capacity among us, and pretend to great ability by intuition. At an early period Amussat reported to the Academy of Medicine that there was a surgeon in Paris who had forcibly extended the contracted knee of a young girl, at which

* Vol. i. page 383.
† American Journal of Medical Science, 1841.
‡ Ueber die Behandlung und Heilung der Contracturen in Knie-und Hüftgelenke. Vienna, 1849.
§ Traité de Thérapeutiques des Maladies Articulaires. Paris, 1853.
‖ Apparatus of Robert.

occasion a crackling had been distinctly heard. The child died in consequence of the operation. These were all, however, but erratic attempts to master the existing difficulty; but with

Fig. 26.



Louvrier, a young physician of Pontarlier, the method of brisement forcé acquired a more tangible form, (1839.) As a matter of course, the opposition which he encountered was considerable, but equally enthusiastic in behalf of the new method were his friends, and thus he engaged, at last, the interest of the Academy of Medicine. The apparatus which he employed was complicated and clumsy. The results were imperfect. In all his cases the knee-joint did not attain a good form. Some limbs were not perfectly straight. Out of twenty-two cases, three died. In some purulent infiltration occurred. Owing to the imperfection of his proceeding, the extension, in some, terminated in posterior subluxation of the tibia, Fig. 27, as was subsequently verified by post-mortem examination. Notwithstanding all the imperfections, Louvrier has certainly deserved well for the establishment of an orthopædic method which, by gradual improvements and additions, constitutes in our day a most powerful and efficacious remedy in a class of difficulties which had been hitherto unmanageable. Nor can the discretion which he observed, and the candor with which he admitted the shortcomings of his efforts, be too highly appreciated. Among his most determined opponents at the time were Ferguson and Stromeyer, both of whom, in not very flattering terms, disposed of his method. Dieffenbach was, to our knowledge, the first surgeon who not only vindicated, but had the courage to adopt it, although he added tenotomy. In a comparatively short time this distinguished surgeon had operated upon 200 patients, and reports the general result in his work on operative surgery, to the effect that he lost but two patients by suppurative exhaustion. That amputation was required in one, that in some the limb was improved to a moderate degree, in others anchylosis became re-established. A large proportion of the patients were materially benefited.

Fig. 27.

Some advancement has this method of treatment received at the hands of Professor Bernhard Langenbeck, of Berlin, but it should be remembered that he had a most powerful aid-de-camp, namely, chloroform. In his inaugural dissertation, in entering upon his professorship,* he pronounces gradual extension ineffective; the division of the contracted muscles, as performed by Dieffenbach, as superfluous, and even dangerous, by inviting the entrance of air and thus giving rise to suppuration. Louvrier's method is, according to him, too uncertain, and its results removed from the control of the surgeon. The technicism of Langenbeck conforms, in most points, with those of Dieffenbach. The results which Langenbeck attained up to 1853 are compiled in the inaugural dissertation of Philipp Frank.†

In carefully analyzing the results of Louvrier, Dieffenbach, and Langenbeck, and in comparing them with each other, it cannot be denied that

* Commentatio de contractura et anchylosi genu nova methoda violentæ extensionis ope curandis. Berolini, 1850.

† De contractura et anchylosi articulationis genu et coxæ Berolini, 1853.

Dieffenbach's were superior to Louvrier, and Langenbeck's better than his predecessors. But all of them are certainly imperfect, and by no means satisfactory. Louvrier caused, in three cases, considerable injuries to the knee-joint, and consequently lost them. Of what nature these injuries were we have not learned, nor the reason why they happened in three cases, and not in the remainder. Very likely that they were cases of true anchylosis, and that he fractured the bones, or caused diastasis of the epiphysis, or tore vessels or nerves. The subluxation of the tibia, in almost all the cases of Louvrier, must have been a great detriment to the final result of his treatment. For, in the first place, the posterior projection of the tibia must have, by necessity, compressed the popliteal nerves and vessels, thus materially interfering with the circulation and innervation of the leg. Again, the gastrocnemius was evidently put on the stretch, and the heel prevented from reaching the ground. Moreover, the contracted flexor muscles were so much irritated as to cause serious subsequent troubles. Dieffenbach's method was, therefore, a material improvement. In using *manual* force alone, he protected himself against the error of meddling with cases of true anchylosis, not amenable to brisement forcé, and by dividing the contracted muscles, he relieved the patient from the serious consequences appertaining to undue extension. Lastly, in breaking the anchylosis up, by alternate flexion and extension, he obviated subluxations of the tibia. The real merits of Louvrier or Dieffenbach for the advancement of this province of orthopædic surgery are, in our humble judgment, obviously greater than those of Langenbeck. The method of the latter is essentially that of Dieffenbach deprived of the benefit of tenotomy, but favored by chloroform.

We have the most unreserved appreciation of the great talents and diligence of Langenbeck, to whom surgery is greatly indebted for many of its improvements, but we appreciate truth and clinical facts still higher. About 500 cases of affection, contraction, and anchylosis of the knee-joint have given us ample opportunities for most thorough clinical observations, and entitle us to a participation in the settlement of the important question, which is still being discussed by the highest scientific tribunals of Europe, and before which Langenbeck maintains his former position.

On the feasibility of brisement forcé we all agree. Its superiority over progressive extension can no more be questioned, and its former opponents have been effectually silenced by the overwhelming results of that practice. It has also been clearly demonstrated that the hand is a better mechanical adjuster than the lever and the screw. But for the introduction of anæsthetics, more especially of chloroform, the operation would have been of little practical value. The pain attending it is severe enough to terrify the boldest patient and surgeon. The subsequent sufferings it entails, and the uncertainty of its success, would have driven it again into oblivion. Chloroform and tenotomy alone have secured the future of brisement forcé. The former renders it perfectly painless, the latter protects against conservative effects, which are worse than anchylosis and the contraction of the knee-joint together. We do not dispute that, in some instances, simple extension will suffice to overcome permanently a moderate reflex contraction. Further, we have observed that a weight of a few pounds fastened to the extremity for a few days will have the same effect. But a high degree of muscular contraction can be subdued by division only. The name of Langenbeck was sufficient inducement for us to follow his directions. We tried his method in quite a number of cases; we succeeded, in most of them, in extending the extremity, but as soon as the anæsthesia subsided, the muscles commenced contracting again, or, if prevented therefrom by mechanical restraint, an intense suffering ensued. There are but few maladies that cause so intense agony, and prostrate the constitution in so short a time, as the persistent extension of contracted muscles. We remember, among several cases, particularly one of a little boy, who was brought on from Montgomery, Alabama, with a contraction of the knee-joint. The original disease, synovitis, had subsided two years before. The joint was quite well, and there was no pain felt either on motion or pressure. Moreover, the mobility of the joint was not materially disturbed, beyond the impediment of the contracted flexors. Under chloroform only the biceps muscle felt tense, and we divided it. We then easily succeeded in extending the leg, and in securing its position in a straight splint. The anæsthesia had scarcely passed off, when the patient began crying loudly, and very soon the articulation became tender and distended. Inflammatory fever set in, with a pulse of 150. The strongest opiates, the most active and persistent general and local antiphlo-

gosis made no impression whatsoever. The paroxysmal pains suggested to our mind their specific character. On relieving the limb from its restraint it immediately bent. This was another indication in the same direction, and yet the tension of the remaining undivided flexor muscles was so trifling as scarcely to deserve notice. On the sixth day after the operation, the joint was greatly distended and fluctuating, without the slightest sign of amendment. At that juncture, we again placed the patient under chloroform, when again all muscular tension vanished, and we had to wait for the subsidence of anæsthesia in order to mark the tendons to be divided. What sedatives and the whole antiphlogistic apparatus failed to effect, tenotomy did. Rest immediately ensued therefrom. From that moment improvement commenced, and eventuated in perfect recovery. We could adduce several instances of the same striking and conclusive nature. But one will suffice to illustrate the importance of tenotomy in the treatment of the deformity under consideration. We shall now proceed to delineate the plan which we have adopted, and which we have reason to believe is the mildest, the safest, and certainly the most effective. First, be certain in the diagnosis. Fibrous anchylosis may be easily recognized, for there always remains a moderate degree of mobility at the joint; even osteophytes are not incompatible with mobility, more especially when they arise from one bone, and do not firmly connect with the other. But if both bones are united by osteophytes, there is nothing left of mobility, and in as far as the latter is concerned, there is no symptomatic difference between a true anchylosis and that caused by osteophytes. The previous history of the case alone can give you a clew as to the nature of the anchylosis. From our preceding remarks you may be led to expect osteophytes from previous periostitis, and true bony union from a more structural affection of the joint itself. Supposing, then, that we had either a fibrous or an osteophytic anchylosis, with marked contractions of the flexor muscles, we would suggest, first of all, to divide all the contracted muscles. It will be better to do this six or eight days previous to the performance of the brisement forcé. By that time the wounds have firmly closed. No air can enter and give rise to suppuration, and you obviate at least one of the objections raised by the opponents of tenotomy. It is, of course, indifferent whether you use chloroform on that occasion, since but little pain accrues from the operation. Nor do we deem it necessary to give you special advice as to the flexor muscles of the leg, since by extension you can raise them from the adjacent parts, and divide them successively as they present themselves. The division of the tendon of the biceps deserves special mention. The external popliteal or peroneal nerve is in such close approximation to the internal margin of the tendon as to be easily cut through. If this be the case, paralysis of the abductor muscles of the foot and talipes varus would, inevitably, follow. In order to avoid this nerve, you have to divide the tendon either from outside by dead pressure with a tenotome not too sharp, or by inserting it close to the inner margin of the tendon, and give the edge an outward direction.

But if there be no trace of mobility in the joint, as in complete osteophytes, the brisement forcé should precede the tenotomy, for reasons that require no further explanation.

In order to perform brisement forcé, the patient should be fully under the influence of chloroform. He should be placed on his face, but at the same time due attention paid to respiration, for at that degree of anæsthesia respiration is very feeble, and in the main diaphragmatic. The slighest impediment may entirely arrest it. As soon as the patient is thus prepared, you have the thigh properly fixed by an assistant, and then taking hold of the leg, bend it with a sudden jerk, and thus extend it; and so continue to alternate between flexion and extension, until the articulation is quite free. If there be any rotation of the tibia, it will be advisable to amend that position by retwisting it in the opposite direction. This done, bandage the extremity carefully with a roller, surround the knee-joint with strips of stout adhesive plaster, and fasten either the extremity in a straight iron splint, such as you see before you, or adjust the extension with the pulley and weight, as before described. In order to correct the lateral position of the limb, Professor Robert places side cushions inside of the splints before fastening the extremity, and has obtained good results thereby.

With this plan we have obtained most satisfactory results, and have never had any trouble in producing a speedy and steady recovery of numerous patients. It was never followed by inflammation or neuralgia, that other surgeons have complained of; nor did the contraction return, provided all the contracted muscles had

been successfully divided. If any of those symptoms should set in, rest assured that the tenotomy is not complete. The earlier you perfect it, the better it is for your patient. It is needless to contend against them by antiphlogistics and sedatives; you will effect nothing. Tenotomy is the only remedy.

Most patients are quite satisfied with a straight and stiff limb. The after-treatment requires then very little more than an instrument affixed to the limb, which we here exhibit, Fig. 28. It consists, as you perceive, of two straight pieces of steel properly adjusted to the form and length of the extremity. It should extend from the upper third of the thigh almost to the ankle-joint. The splints are connected by four iron bands embracing the posterior half of the member, of course well padded; the anterior half is completed by a broad leather belt. A knee-cap, made of stout buckskin, which combines both firmness and elasticity, to be fastened to the splints, should prevent the knee from bending. The same apparatus answers equally well in the after-treatment of transverse fracture of the patella. The extremity thus secured and protected against incidental motions will enable the patient to walk a week or fortnight after the operation, and he should wear it until the knee-joint is perfectly anchylosed. If, however, the patient desires the re-establishment of articular mobility, and his case is favorable, the after-treatment will necessarily be more tedious. You will, in this instance, keep the extremity for a longer period under elastic extension and counter-extension, while daily passive motion must be instituted. You may combine it with inunctions of appropriate liniments with warm local baths, and expose the joint to hot vapor and other remedial substances which you may deem proper. Time and perseverance, united with discretion, will achieve much benefit for your patient.

The brisement forcé is in appearance and reality a powerful remedy. It overcomes, by main force, all resistance; it ruptures the fibrous adhesions of the joint and unyielding tissues, and can certainly do great mischief if indiscreetly performed. But in using the necessary precautions with physical power, nothing is to be apprehended therefrom. In the large number of our cases we had but two accidents: one of them was inevitable, and certainly could not be foreseen. The case refers to Patrick Feeney, a youth of about sixteen years. He was tall, slender, and evidently of feeble constitution. Having been employed in a manufactory in which he had to tread a wheel, he had thus acquired an inflammation of his knee-joint, which terminated in a deformity. His leg was bent at an angle of 105°, but permitted mobility within an angle of 30°; beyond which there was resistance on the part of the contracted biceps, and some other articular impediments. The patella was moderately movable. After having divided

Fig. 28.

Fig. 3.

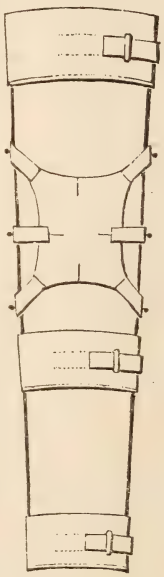


Fig. 29.

the tendon of the biceps, we increased the flexion of the limb by a comparatively gentle effort, when, to our surprise, the resistance suddenly yielded. A few days afterward a slough appeared in the popliteal space, and the suppuration became so profuse as to render amputation imperative. It was then found that the epiphysis of the femur had yielded, whereas the articular adhesions had remained unbroken, Fig. 29. The disproportionate strength of the articular adhesion, over and above the union between the lower extremity of the femur to its shaft, was the proximate cause of the accident, and certainly could not have been anticipated. A large proportion of our patients have been children where the same condition of the femur existed; yet we never met with a similar accident, nor have we found anything like it recorded in medical literature.

A moderate physical force is sufficient to fracture osteophytes, at least we have found it so. Should you not succeed in accomplishing your object, try it again; but do not employ violence, for you might fracture the bones. Some years ago, Dr. Moses invited us to a proposed exsection of the knee-joint, at the "Jews' Hospital," for true anchylosis. The limb was in a flexed position and the articulation absolutely immovable; but the entire absence of scars and the previous history of the case suggested periostitis as the remote cause of the trouble. Before the intended operation was commenced, Dr. Moses, with our advice and assistance, attempted to extend the limb by brisement forcé, *and succeeded.* The crackling heard upon that occasion by all present left no doubt that the articular impediments consisted in isolated bony connections, and probably in osteophytes alone.

In extensive and complete osseous union of the knee-joint, brisement forcé is of course ineffective. Rhea Barton's operation alone is calculated to meet the emergency. Although originally proposed for the relief of anchylosis of the hip-joint, its author conceived the practicability of the operation in the same morbid condition of the knee-joint. In 1835 he, for the first time, performed the exsection of a wedge-formed piece of bone from the knee, and the result attained was highly satisfactory. The wound closed in two months, and in five and a half months the patient resumed his avocation as practicing physician.

The second operation of this kind was resorted to by Prof. Gibson, of Philadelphia, and likewise terminated favorably, the patient being capable of walking without crutches five months after.

The third operation Dr. Gordon Buck successfully performed at the New York City Hospital in 1844. The patient subsequently sustained a fall from a ladder and fractured the new union; recovery ensued without any untoward incident.

Since then the same operation has been repeated by Mütter, Bruns, (Tübingen,) Heuser, B. Langenbeck, Ried, Robert, Post, (New York,) and others. As far as we have ascertained, but two cases proved fatal, (Bruns and Post;) the balance recovered with useful extremities. The technicalities of Barton's procedure may be found in every work on operative surgery.

Prof. Brainerd, of Rush College, has, some time ago, suggested weakening the inter-articular substance by drilling it in various directions through a small wound, and then to fracture the rest. How many operations have been made according to this plan, we do not know, but its application signally failed in a case of one of our most accomplished surgeons, (Prof. Gross,) and a chisel had to be resorted to, which was driven through the bony connection.

A similar proceeding had been proposed by Prof. Shuh, of Vienna, as early as 1853, but did not meet with the approval of German surgeons.

Whether the recently introduced so-called osteoplastic operation of B. Langenbeck has been attempted in true anchylosis of the knee-joint, we are equally ignorant, but apprehend that a simple separation of the articular faces by drill or saw will scarcely suffice to give a good form to the extremity, the new bony substance being an impediment; and, therefore, we would prefer, of all the methods suggested, that of Rhea Barton, which has proven itself both effective and comparatively harmless.

COMMUNICATIONS.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

By Geo. K. Smith, M.D.,

Demonstrator of Anatomy in the Long Island College Hospital, Brooklyn, New York.

Concluded from page 514.

The following is a brief history of the specimen owned by William Parker, M.D., Professor of Surgery in the College of Physicians and Surgeons of the City of New York. The patient was an unmarried female, about sixty years of age when the accident occurred, and was at that time an inmate of the Almshouse of Barnard, Vermont. "One morning while going out of doors she fell, striking upon her hip." "On examination, the physician in attendance diagnosticated a fracture of the neck of the femur, there being present crepitus, shortening, eversion of the foot, etc." The doctor applied the straight splint, and on removing it at the expiration of six weeks, found that the limb was shortened half an inch. Four years after the injury, the fractured bones, together with the sound femur of the same subject, came into the possession of Professor Parker, and I am under many obliga-

tions for his kindness in lending me the specimens till the artist could represent them by the drawings.

Fig. 11 represents a view of the posterior surface of the fractured bone. The shaft of the bone is rotated outward, and the posterior surface of the neck is very much shortened by absorption;

Fig. 11.

so that, measuring from the points indicated in Fig. 4, the distance from A to B is only $\frac{3}{8}$ of an inch; C to D, $\frac{1}{2}$; and E to F, 1 inch; while the distances from A, C, and E to the line of union are, respectively, $\frac{3}{8}$, $\frac{1}{2}$, and $\frac{5}{8}$ of an inch.

Fig. 12. Anterior view of same specimen. A A is the line of union, and B B the inter-trochanteric line. The length of the anterior surface of the neck is exactly the same as that of the sound bone, the neck having lost nothing by absorption on this surface. The line of union is internal to the inter-trochanteric line, $\frac{1}{2}$ an inch above, and $\frac{5}{8}$ of an inch below, consequently the fracture was, without doubt, entirely intra-capsular on the anterior surface of the neck.

Fig. 13 exhibits a section of the fractured bone. The white portion, represented by the letter A, is a condensed bony structure, shooting upward in parallel plates from the line of union into the head of the bone. B is a similar condensation of the cancellated structure, passing

Fig. 12.

downward from the line of union into the shaft of the bone.

Fig. 13.

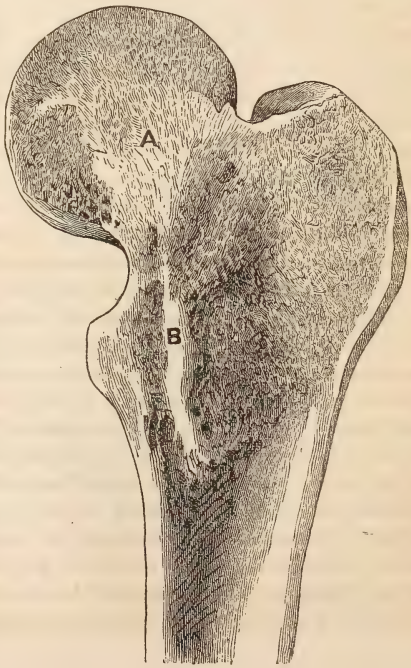
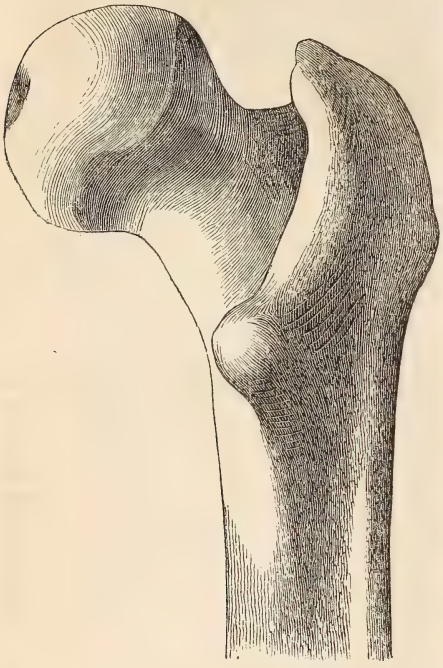


Fig. 14. Posterior view of sound femur of the same subject. The length of the neck on its anterior surface is 1 inch, and $1\frac{3}{4}$; and the length on the posterior surface is $1\frac{1}{4}$, $1\frac{1}{4}$, $1\frac{3}{4}$, measuring from the points given in Figs. 3 and 4.

Fig. 14.



The line of union, on the posterior surface of the neck of this specimen, is too near the shaft of the bone to be included by any specimen of the normal capsule which I have seen. The line of fracture may have been as close to the shaft of the bone as the line of union is; and, if so, the shortening of the posterior surface of the neck by absorption has been entirely at the expense of that fragment of the neck which was attached to the head of the bone. Again, the fracture may have been altogether within the capsule, and if this were the case, it is probable that the loss of structure by absorption has been partly at the expense of each fragment of the neck, union having occurred after the absorption of the femoral fragment had reached a point far without the normal capsule. The line of union has, by many writers, been considered identical with the line of fracture, but this can only be true of those specimens in which the neck has lost nothing of its length by absorption; for if a portion of the neck be removed before union occur, it is impossible to determine that the absorption was entirely at the expense of either fragment.

The specimen represented by the following engravings was very kindly loaned to me by Alfred C. Post, M.D., Professor of Surgery in the University Medical College of the City of New York. It is to be regretted that this specimen came into the possession of Prof. Post unaccompanied by a history. Prof. Post states that he "exhibited this specimen at a meeting of the Medical and Surgical Society of the City of New York," and that "it was believed by most of the members present to be an illustration of bony union of intra-capsular fracture; but a few of the members took opposite grounds, and contended that the bone had never been broken."

Fig. 15.

The external appearances of this specimen are strongly indicative of bony union of fracture

within the capsule, while a section of the specimen exhibits no evidence that the neck was ever broken. The cancellated structure of the head, neck, and upper part of the shaft is perfect and entire; and this appearance is seldom, if ever, seen in well-authenticated cases of bony union after fracture of the neck. If the neck were ever broken, the fracture and the union of the fragments occurred, without doubt, entirely within the normal capsule; but there must exist some doubt that the neck was ever fractured.

Fig. 15 is an anterior view of Prof. Post's specimen. Fig. 16 is a view of the posterior surface of the same specimen. Fig. 17 exhibits a section of the specimen.

Fig. 16.

Fig. 17.

"Dr. Charles A. Pope, Professor of Surgery in St. Louis University, Missouri, informs me that he has an example of 'intra-capsular fracture of the neck of the femur, with concomitant fracture of the acetabulum. The union by bone is perfect, although the neck is, as it were, gone, the head being almost squarely set on the shaft of the bone. The head is much deformed, being an enlarged cone, and fitting into a similarly shaped acetabulum. The motions of the joint were well preserved.' I have never seen this specimen, and I am therefore unable to speak of it authoritatively; but I confess I do not see how it is possible to know that the fracture was wholly within the capsule when the neck is gone."*

Professor H. H. Smith, of Philadelphia, in his work on Surgery, page 399, has the following brief report of two cases of bony union, after fracture of the neck of the femur:—

"There is in the Wistar and Horner Museum of the University of Pennsylvania, a femur, apparently of an old woman, in which the neck has been fractured near the head, yet, in which complete osseous union, though with some degree of shortening, has taken place. I have, moreover, in my own cabinet, a specimen in which the bone has been fractured through the neck near the head, the fragment having slid down beneath its natural position, and the fracture traveled obliquely down the neck, though still within the capsule, splitting it off in the line of the intertrochanteric ridge. In this case, which must have produced marked shortening of the limb, there is complete osseous union."

The report of the first case is very brief and unsatisfactory, while that of the second is given

* Hamilton on Fractures and Dislocations, page 370.

more at length. Prof. Smith states that "the fracture traveled obliquely down the neck, though still within the capsule, splitting it off in the line of the inter-trochanteric ridge," and if this be true, the fracture extended some distance beyond the limits of the synovial membrane, and cannot therefore be regarded as an intra-capsular fracture. (See Fig. 1.)

SUMMARY.

1st. The insertion of the capsular ligament of the hip-joint varies so greatly, that scarcely any two specimens of the normal capsule, taken from different subjects, can be said to be inserted into the neck of the femur at the same point, and so wide are the differences seen that, if a transverse fracture of the neck of the femur be located at a given distance from the posterior inter-trochanteric line, it will be found to be entirely included by the capsular ligament in one specimen, and on the posterior and inferior surfaces of the neck, half an inch or more external to the capsule, in another; hence it is impossible to determine the precise location of capsular insertion by measurements of the neck of the femur after the removal of its capsular ligament; and it is also impossible to indicate the line of capsular attachment by comparing the dried bone with a specimen taken from another subject, to which the capsule still remains attached.

2d. The descriptions of the insertion of the capsular ligament given in our works on anatomy are even more widely at variance than the differences seen in nature. Some locate the posterior insertion of the capsule at the middle of the posterior surface of the neck, some at the posterior inter-trochanteric line, and others at all points intermediate between these two extremes; hence, if fracture of the neck of the femur occur at any point between the head of the bone and the posterior inter-trochanteric line, we can find authority among anatomists for believing that the fracture is intra-capsular; and it will be observed that, notwithstanding the extreme diversity among our authors in describing the insertion of the capsular ligament, not a single one even intimates that it ever varies from the position which he, himself, has assigned to it.

3d. The insertion of the capsular ligament is often removed by the morbid changes consequent upon fracture of the neck of the femur; therefore the capsule of the fractured bone cannot be said to furnish reliable evidence that the fracture was within the normal capsule. The normal capsule is usually inserted into the middle of the posterior and inferior surfaces of the neck; in some instances a little nearer the head of the bone than this point, and in others more remote, but never as far distant as the shaft of the bone; while the capsule of the fractured bone is often found to have its insertion into the shaft, the entire neck of the bone having been removed by absorption before union occurred.

4th. The capsular ligaments of the opposite femurs of the same subject are exactly alike in their insertions into the neck of the bone; hence if the surgeon who makes an autopsy after union of fracture of the neck of the femur removes both hip-joints, the insertion of the capsular ligament of the sound femur will show the normal insertion of the capsular ligament of the fractured bone, and a comparison of the two specimens will determine at once whether the line of union in the given specimen be altogether within the normal capsule.

5th. The line of union in a given specimen of fracture of the neck of the femur cannot be said to indicate the exact position of the line of fracture, if the neck suffered loss by absorption before union occurred; since it is impossible to determine that the loss of structure was entirely at the expense of either fragment of the neck. Some surgeons have recorded, as examples of bony union of intra-capsular fracture, cases in which the neck was completely removed by absorption, and the head of the bone closely united to the shaft, and have claimed in these instances that the neck was fractured close to the head of the bone; while other surgeons, who also regarded the line of union as being identical with the line of fracture, have maintained that the fracture in each of the given specimens occurred close to the shaft of the bone.

6th. Under favorable circumstances fractures of the neck of the femur external to the capsular ligament unite readily by bone, so also do fractures which are partly within and partly without the capsule; and it is highly probable that fractures within the capsule, which are followed by absorption, are sometimes united by bone, after the process of absorption has reached a point external to the normal capsule, where bony material is supplied; but this, if it ever does occur, can never be proven; for, if the line of union be partly without the normal capsule, it is impossible to determine that the fracture was entirely within

it, and we can never be positive that bony union of intra-capsular fracture has occurred, until a specimen is presented in which the line of union is found to be entirely included by the normal capsule.

7th. Fractures of the neck of the femur are, in most instances, followed by the absorption of a part or the whole of the neck, and a careful review of the cases recorded as proofs of bony union of intra-capsular fracture shows that, in the great majority of the cases, the posterior surface of the neck of each specimen had lost very much of its length by absorption before union occurred, and that the line of union on this surface, although included by the morbid capsule of the specimen, was too near the shaft of the bone to be included by any specimen of the normal capsule.

8th. Fracture within the capsule is followed, to a greater or less extent, by disease of the different tissues which constitute the hip-joint, and the neck of the femur being very imperfectly nourished after the fracture, usually suffers great loss by absorption before union occurs, so that its appearance after union resembles that appearance of the neck which is described by pathologists as the result of an interstitial absorption of the neck which occurs without fracture, as a consequence of old age. So closely allied are these appearances, that eminent pathologists in this and in other countries have claimed, with at least a fair show of reason, that many of the specimens hitherto exhibited by surgeons as proofs of bony union of intra-capsular fracture, have been examples illustrative of the changes produced by interstitial absorption; hence, in the further investigation of this subject, it becomes a matter of great importance that the diagnosis of fracture of the neck be clearly made out, and that it be vindicated by competent surgeons in consultation, and placed upon record in anticipation of an opportunity to complete the history of the case, it may be many years afterward, by describing the post-mortem appearances of the fractured bone.

What Next?—Apropos to the visit of hydropathy to Washington to induce the Government to allow that phase of humbuggery to be tested in the treatment of the sick and wounded in the hospitals in that city, we observe that recently a spiritualist appeared before the Military Committee, to urge the organization of a corps of clairvoyancers to be consulted in the treatment of disease, and suggested that they might also be employed to remove wagons out of the mud.

Illustrations of Hospital Practice.

PHILADELPHIA HOSPITAL.

MEDICAL CLINIC.

Service of Dr. Da Costa.

February 15, 1862.

MANIA A POTU.

This case was that of a laborer aged twenty-three, admitted on the twelfth at 6 P.M., with all the usual symptoms of delirium tremens. He had nausea, and there was some evidence of further gastric disturbance. An emetic was immediately administered, followed by a full dose of salts, and he was then placed upon the use of verat. viridi.

The delirium in mania a potu is not a fierce delirium. It partakes rather of a rambling, good-natured wandering, though in some cases it becomes more violent. It is accompanied with a peculiar trembling nervousness, which gives it its name. The patient recognizes persons about him, receives his physician courteously, answers questions without hesitation, and gives rational answers, but his mind immediately wanders off upon subjects quite foreign. Morbid wakefulness is one of the characteristic symptoms. The patient does not sleep. His nervous system is excited to such an extent that he cannot sleep. We are told that this disease follows the suspension of the habitual use of intoxicating drinks in those long accustomed to their use. My observation here does not certainly confirm this view, but rather leads to the opinion that it is produced by an *excessive use* of liquors, by habitual tippling, lasting many days. Persons attempting to abstain from their use do sometimes get mania a potu, but it is not, I think, the rule. In this house, the cases that come into the wards are invariably the result of a continued debauch. The disease may be confounded with meningitis, or with the delirium of fever; and how will you distinguish it? The delirium of fever is more incoherent, is attended with a wholly different expression of countenance, and with heat and dryness of the skin. That of meningitis is more violent and complete, with a strong tendency to convulsions and coma. It is accompanied with a high, bounding, tense pulse, and is without the terrors and muscular tremblings of the alcoholic disease. And there is greater febrile disturbance in meningitis; yet the latter may be complicated with the delirium tremens, and form what may be termed mixed cases, in which the symptoms indicate congestion, or possibly inflammation of the brain, and render the diagnosis doubtful. In those cases the pulse must be your chief guide. It has not the fullness and tensity peculiar to pure meningitis, but more than in pure delirium tremens.

Treatment.—There are certain cases which stop short of actual delirium; hallucinations are not marked, there is trembling, but no mental wandering. Such cases may be treated by rest in

bed, warm bath, purgatives, and antispasmodics. Another class, in which the delirium and nervous excitement are still more strongly marked, accompanied with gastric disturbance, are sometimes benefited in addition by an emetic; but the prominent indication is to procure sleep. The nervous system must be quieted. If the patient sleeps, he recovers. This is what he requires, and to procure it, give opium in large doses, three grains at once, following it by doses of one grain each till the object, sleep, is obtained. Other antispasmodics may also be used; the salts of morphia may sometimes be given in suppositories, especially when the gastric disturbance is great.

You will often find verat. viridi to be a most valuable medicine in delirium tremens. I have employed it for upwards of a year, and like it much. It quiets nervous disturbance and reduces the pulse. It is especially applicable to cases in which the pulse is full and the face flushed. After a few decided doses the patient generally becomes quiet.

Prognosis.—In general it is favorable, but patients die, at times, suddenly; some with large effusion into ventricles; sometimes the autopsy reveals no cause; some die by a clot effused into the lungs; some gradually sink away, and the dissection shows inflammation of the brain.

In connection with this case, the lecturer exhibited the brain of a man who was admitted into the wards on the thirteenth, in a high state of delirium and cerebral congestion, under which he soon sank, in spite of treatment. The brain exhibited externally the appearance of extreme venous congestion; the membranes were healthy, but there was slight adhesion between the arachnoid and dura mater. On cutting into its substance, we find it extremely vascular, as shown by the small spots of blood diffused through it, which only occurs when the brain is in an extremely congested state. There is slight effusion into the ventricles, and at the top of the brain we find recent adhesions, showing the presence of inflammation, and there is also effusion under the arachnoid.

The diagnosis in these cases is important, and you cannot be too careful in making it. You are not to conclude a patient has mania a potu because he has been drinking. He may have meningitis, or some other disease which disturbs the cerebral functions. Such ideas will lead you into many errors in treatment.

ACUTE TUBERCULOSIS.

John P., aged twenty-two, unmarried, laborer, very intemperate for the last three years, healthy and strong till two years ago, when he took cold and had a cough, which did not become serious until about two months since. He was admitted to the wards on the 29th of January, with a slight cough, but since that time has been rapidly sinking and losing flesh. The prominent symptoms are dyspnœa, respiration 60 per minute; his lips are blue, nose livid; pulse 98 to 100; sputa thick, purulent; percussion shows dullness over right lung anteriorly; auscultation reveals loud gurgling under right clavicle, crackling lower down, and harsh, coarse respiration in the left lung. Now what do these symptoms indicate? An acute chest affection most certainly. The rapid breathing and the history of the case indicate that. It is not bronchitis, as there is no dullness on percussion in that affection. It may be pneumonia, yet he has suffered from a cough for a long time, which is not apt to be the case in pneumonia; and we find, further, in this case, signs of disorganization in the lung which do not belong to that disease. On the contrary, this disease has existed for a long time in the right lung, and the left is now becoming involved; pneumonia affects generally but one side. Again, the sputa of the latter are rusty colored; in this affection they are purulent. And still further, we have here rapid wasting and exhaustion, which, together with signs of disorganization and infiltration into the left lung, and the expectoration of blood some two years ago, confirm the diagnosis of acute tuberculosis.

Prognosis fatal. The life power will soon wear out. He will hardly survive three days. The treatment is palliative only. Give him a teaspoonful of the extract of wild cherry, with one-sixteenth of a grain of acetate of morphia, and what nourishment he will take.

On the 19th the post-mortem examination of this case was presented to the class. At the apex of the right lung a cavity was found, which corresponded to the gurgling sounds heard in life. There was also marked softening of this lung. Tubercles were found in both lungs. The liver is fatty, enlarged; spleen soft in structure; kidneys enlarged, and slightly fatty. The diagnosis made was fully confirmed.

The case of delirium tremens, mentioned above, was also presented before the class as convalescing. He had taken fluid extract of valerian, a teaspoonful, with one-fourth of a grain of morphia, three times a day, with an occasional addition of verat. virid. No stimulants had been given him. His diet had been nourishing. Under this treatment he was improving, but he was still weak, and to complete the cure let him have camphor-water, a tablespoonful, with a teaspoonful of Huxham's tincture of bark.

February 19th, 1862.

NEURALGIA, ARSENIC IN.

G. S., aged fifty-six, born in Pennsylvania, sailor, temperate in his habits, was in good health till three years ago, when he was attacked with general neuralgic pains. Since that time he has had four different attacks, with an interval, in one instance, of eight months. The last attack began in July and continued unrelieved till January. He has taken all the various remedies usually prescribed in neuralgia, such as valerianate of zinc, cannabis indica, quinine, iron, verat. virid., but received from them no essential benefit. About one month ago he was put upon the use

of arsenious acid, in doses of one-twelfth of a grain, three times per day; and when suffering most, the tincture of aconite was applied locally wherever the pain was severest. Under this treatment he has been constantly improving, and is now entirely free from the excruciating pain he has so long suffered. In the administration of arsenic great care should be taken not to carry it so far as to produce the poisonous effects of the remedy.

J. R., a case of abdominal dropsy, before the class on the 22d of January, was again presented. During the interval his suffering had been so intense from the accumulation of fluid that he was tapped, which gave him temporary relief. He was placed upon the use of elaterium, but this remedy not producing the desired result it was discontinued, and he is now taking gamboge, in doses of six grains, together with the juniper-berry tea, and bitartrate of potassa. Under this treatment he expresses himself as feeling much better.

ACUTE RHEUMATISM.

This was the case of a female, aged twenty-one, single, native of Pennsylvania, temperate, seamstress, always delicate; has had the usual diseases of childhood, and of later years intermittent fever and neuralgia. One year ago she had what the physician who attended her designated as yellow fever, from which she recovered very slowly, and which rendered her unable to resume her occupation for six months. During the winter past she has had a cold from exposure. Ten or twelve days ago she began to suffer from severe pain, which became general through the system. In this condition she was admitted to the hospital on the 17th instant. Her pain is most severe in the arms and legs, and she shrinks from the slightest movement or touch. Her joints are swollen and stiff, and she has no power to move herself. Her skin is moist, perspiration acid. In short, she has well-marked symptoms of acute rheumatism. You have seen at this clinic cases of chronic and subacute rheumatism. You now see it in its acute form. This is a first attack, and in all such cases you should carefully examine the condition of the heart, for though I do not believe endocarditis to be always present in acute rheumatism, yet it is frequent, and there is always danger that it may supervene upon it. And why? Because in rheumatism there is an excess of lithic acid (so chemistry teaches us) circulating in the blood, constituting a blood poison, which has a peculiar tendency to fasten upon fibrous and serous tissues, the heart included.

Treatment.—As to the treatment of this disease there is great diversity of opinion and of practice. A celebrated Boston physician, in reply to a gentleman, who inquired of him what was a cure for rheumatism, replied, "six weeks;" implying that unaided nature would accomplish the cure. Yet medicine has an undoubted effect in checking the disease. The veratrum viride is used by some. The Dublin physicians rely upon opium; others think highly of lemon-juice. And others give those remedies which tend to neutralize the poison, and carry it out of the system, the alkalies, for example. This is the method of treatment I prefer. What alkalies shall be used? Some of the preparations of potash, usually the bicarbonate, the acetate, the liquor potassæ, or the tartrate of potash and soda. In this case we will use the latter, and give the patient, therefore,

℞.—Tart. potassæ et sodæ, ℥ss;
Acetas morphiæ, gr. ss.

Twice a day. At night she may have a Dover's powder if the pain be very severe. The remedy is not given for its purgative effect, but that it may be retained and become converted into an alkali in the system. No active purge should be given, but the bowels should be kept slightly open; diet should be moderate in quantity, and of mild character.

PULMONARY FISTULA.

This was the case of a male, twenty-five years of age, who represents himself as strong and healthy till about seven years ago, when he had an attack of pleurisy followed by a relapse. About a month afterward he felt something giving way internally, and he expectorated purulent matter for three days, when the discharge stopped. He soon after this observed a swelling below the right nipple, which in three or four weeks broke and discharged externally, the discharge continuing in varying quantity until the present time. This is one of the terminations of pleurisy, but not a frequent one. A few cases of a like character have occurred in my practice. On introducing the probe it passes in for several inches. The patient coughs much; he has lost flesh; the discharge is offensive. Several points of clinical interest present themselves. There are no symptoms of pneumothorax. The pleura and lung must communicate, yet there is no effusion of air. The opening must therefore be surrounded with firm adhesions, circumscribing the aperture, and thus preventing the escape of the air into the pleura. What are the chances of cure? Uncertain. It may continue a long time, as in this case, or, as in the case of an Italian in this house who had a similar affection, care and good diet may cure him. Various remedies have been used in this case. Iodine has been injected into the fistula and it has been discharged, yet little benefit has resulted from its use. In a medical point of view the most that can be done is to use some mild injection with a view to cleanliness of the part, and give him tonics liberally.

Dr. Gross remarked upon the case, giving it as his opinion that, inasmuch as when the patient is up and walking about no discharge takes place from the opening, a sac would be found below the opening which forms a reservoir for the collecting matter. If so, and he had no doubt it was the fact, a counter-opening below would be the proper remedy, and should be at once made.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

EXPERIMENTAL RESEARCHES ON POINTS CONNECTED WITH THE ACTION OF THE HEART AND WITH RESPIRATION.

In the *Am. Jour. of Med. Sciences* for October, Prof. Austin Flint, Jr., details a series of experiments with reference to the settlement of several important physiological questions, which are as yet subjects of dispute among physiologists. This is an interesting and important paper, of some forty pages, and we have space only for the author's *resumé*.

"In the foregoing essay, I conceive that I have established the following facts, which are either not generally admitted or not understood by physiologists:—

"1st. That the heart elongates during the systole of its ventricles.

"2d. That the cause of the rhythmical contraction of the muscular fibers of the heart is resident in the fibers themselves, is one of their inherent properties, and remains so they retain their 'irritability.' That it is derived neither from the cerebro-spinal nor sympathetic system of nerves.

"3d. That the natural stimulus which excites the regular and effectual movements of the heart is the blood, and that this cannot be replaced by a fluid of less density.

"4th. That though the flow of blood in the cavities of the heart is sufficient to induce, under ordinary circumstances, regular contractions of the organ, still it is necessary that these movements be further regulated and controlled; and that this is effected through the agency of the pneumogastric nerves.

"5th. That the action of the heart may be arrested, through the motor filaments of the pneumogastric nerves, by means of galvanism; that this does not take place in animals poisoned by woorara, on account of the paralysis of the motor nerves. That the motor filaments of the pneumogastrics are the last which are affected by this agent, and that in the alligator they are left almost intact. That the cause of the arrest of the heart by galvanization of the pneumogastrics is the exaggeration of the force which regulates the action of the heart, rendering it slower and more powerful.

"6th. That in asphyxia, the cause of the arrest of the action of the heart is over-distention of its cavites; and that anything which brings about a sufficient amount of distention will equally arrest the action of this organ.

"7th. That the auriculo-ventricular valves are closed by a backward pressure operating during the contraction of the ventricles, and not by the current of the blood from the auricles to the ventricles.

"8th. That the excitation which gives rise to the reflex phenomena of respiration is received from the general system, and not from the lungs or heart. That this excitation is due to the want of oxygen in the tissues, and not to stimulating properties in the venous blood. That the exaggeration of this excitation constitutes the sense of suffocation, and gives rise, if excessive, to general convulsions."

DIET, DRINKS, AIR, ETC. FOR THE SICK.

Dr. John Ware, in his admirable lectures upon *General Therapeutics*, has a few interesting suggestions upon the subject of dietetic and nursery attentions for the sick. Though these are matters that more particularly come within the province of the professional nurse, yet they are not beneath the attention of the physician, for, in the country at least, he must direct all these matters, and to be able to do it well is often of more consequence, so far as his reputation and success is concerned, than the most erudite prescription.

We make a few extracts from the *Journal* for November 11th:—

Diet. — In regard to the proper diet for the sick, he thinks the appetite may often be safely consulted as to the *kind* of food, but more seldom in regard to quantity. It is sometimes necessary for a patient to take food though the appetite is entirely wanting, and in other instances it is necessary that less be taken than is craved.

"Yet a hungry patient is seldom to be denied something, and of the kind he desires. It is often astonishing to observe, when the fancy is strongly fixed upon some particular, how well it will be borne and digested, even when it was one that would seem, on ordinary principles, to be one of the most improper. This is especially noticed when convalescence is fairly established."

We have observed this often, and, in cases of disease, seldom disregard the demands of the appetite as to the kind of food. We have a case under observation now that presents some interesting points bearing upon the subject. Our readers will remember we detailed in the Reporter for December 21, 28, page 291, an interesting case of a child, apparently convalescing from tuberculosis, in its last stages of emaciation, etc., under the use of Fowler's solution of

arsenic, iodide of potash, and belladonna. We remarked that, previous to the commencement of convalescence the appetite had for many weeks been almost nothing, while an exhausting diarrhœa continued to harass the patient. In fact, nearly all the child would take was a little boiled rice and drink a little milk. It would not be fed with the rice, but with its almost skeleton fingers it would pick up one kernel at a time, and perhaps not eat over a teaspoonful or two in the day. The first article craved after convalescence commenced, was hickory-nut meats. These we allowed the child to take as freely as it chose. No bad effects were observed—he digested them well, and improved in flesh and strength. Very soon after commencing with these he called for fried cakes, and these were not withheld. Fried cakes, hickory-nut meats, and a little wine constituted the principal diet for several weeks. When the child began to lose relish for these, pop-corn was the next article craved, and was allowed as the appetite required. Now the child has an irresistible craving for *starch*, which it will and does take in large quantities without either cooking or admixture—eating it as it would carbonate of magnesia, dry. Wine has been continued, as it had been for some time before convalescence commenced. The child is apparently doing well—growing, gaining flesh, and all its functions seeming to be normally performed.

We have observed similar unnatural desires in regard to drinks. In typhoid fever in particular we have observed an almost irresistible desire for *hard cider*. This desire we have indulged; have known a quart or two to be drunk in a day, not only without injury but with most marked benefit.

In regard to milk as a diet for the sick, Dr. Ware says:—

"There is no article which in cases of doubt, where the patient demands food in any stage of acute disease, can be so safely permitted as milk. There is, to be sure, a singular prejudice against its use, and it is regarded by most of those in the common care of the sick, as one of the most unsuitable kinds of nourishment. This prejudice is entirely without foundation, and it is rarely, where it is desired and relished, that milk may not be administered in some quantity. * * * Upon the whole, there is hardly any form of food equally substantial and nutritious, of which the residuum, when not digested, is passed on to the intestines, is received and fecalized with so little labor and irritation. * * * * * The milk of the several animals used by man resembles the natural food more closely in its composition and adaptation to the wants of the human system than any other known substances."

We have found more difficulty in convincing nurses of the harmlessness of a milk diet for the sick than almost any other connected with our professional labors. Where we deem food absolutely essential and yet there is no appetite, but great thirst, we add new milk to cold water—one-half, one-fourth, or even less of milk, as may be deemed proper, considering the amount of drink taken and of nourishment required.

Drinks.—But little need be said upon this point, for but few physicians now deny to their patients drinks in liberal quantities. Cold water, or small pieces of ice allowed to dissolve slowly in the mouth, are the best means of quenching extreme thirst. Formerly great restrictions were placed upon drinks, and even now many physicians insist upon warm teas or very small quantities of cold water.

Referring to these errors of the past, Dr. Ware says:—

"Instead of pure cold water, the parched and feverish tongue has been moistened by sparing quantities of a thousand infusions and other preparations, of which the best that could be said was, that they were not directly hurtful."

Air.—Upon this point Dr. Ware says:—

"There has always been a strange perversity of judgment among mankind as to the nature and requirements of the state of sickness. It has been looked upon as a state specifically different from health, in which whatever was most agreeable, refreshing, and healthful to the well man was to be denied to the sick. Patients have been immured in hot, close, ill-ventilated rooms, and confined to beds surrounded with close-drawn curtains; light and air have been excluded; instead of substituting the pure breath of heaven for the offensive exhalations of disease, it has been sought to hide them from the sense by the fumes of vinegar, or rum, of aromatic drugs, while chemical ingenuity has been exhausted for means to neutralize them by I know not what number of offensive and very probably injurious gases. * * * * No doubt the necessity of sufficient ventilation is now universally acknowledged, but the difficulty is in the appreciation among mankind of what sufficient ventilation is. The more freely and constantly the patient with acute disease is entirely exposed to the open air of heaven, the more advantageously does he go through with his malady. No fact in therapeutics is better established than this."

This requires a little qualification—we would not put a patient "entirely" out of doors and

keep him "constantly" there, especially in mid-winter. The idea is that the patient should be constantly in the receipt of new supplies of air, so as not to be necessitated to breathe the same air repeatedly, and that poisoned with diseased exhalations.

DIPHTHERIA IN THIS COUNTRY THIRTY-THREE YEARS AGO.

A correspondent of the *Boston Medical and Surgical Journal* for November 14th, says that he finds in the *New Hampshire Observer* for the year 1828, an account of a so-called "new disease." An extract from the paper of that date is subjoined:—

"*Curious Disease.*—Within the last three weeks Mr. Alvah S. Crafts, of Middlefield, has lost three children, and is now childless, by a disease without a name in this country. The first symptoms of diseased affection show themselves in a cankerous humor near the root of the tongue, inflammation ensues, and the subject finally dies in all the agony of the croup."

PIN-HOOK FOR REMOVING PINS FROM THE ŒSOPHAGUS.

In the *Am. Med. Times* for December 14th, Dr. J. W. Riggs figures and describes an instrument for removing pins from the œsophagus. It is difficult to describe this instrument, but it is readily understood from a cut of it. It is made of a small wire with a hook at the extremity, and three or four similar hooks attached at short intervals above.

"In making an instrument of this kind, the upper end of each hook should be so curved or rounded over as not to engage in the tissues in its passage either inward or outward, and the space between the returned end of the hook and the body of the instrument should be such as to receive the body of the pin without admitting the passage of its head. The lower hook may be formed of the main wire, and the additional ones of separate pieces of suitable length and secured upon opposite sides by means of common waxed thread."

THE TREATMENT OF SUPPURATING JOINTS.

Dr. Cooper, of San Francisco, in reply to some remarks in this journal on the priority of the practice of making free openings into suppurating articulations, makes the following remarks:—

"We do not claim to be the first who opened joints in a state of suppuration. There are several cases reported in standard works upon surgery, but we know of no standard work in which the practice is recommended as a rule. The cases mentioned were generally regarded by the writers as exceptional ones. Whereas, we believe that in *all* cases where purulent matter is found, to any considerable extent, in a joint, it should be discharged by a free incision, if such an operation would be proper in the patient who has burrowing of matter in any other part of the body, and that the operation is more imperatively demanded in the former than the latter case; and further, that the more complicated the joint (such as the knee) the more the operation is demanded early.

"Probably medical journalists have been led into the opinion that we urged an exclusive claim to this practice, in consequence of our articles upon the subject being generally accompanied with remarks in regard to the innocuousness of atmosphere admitted into the joints. Upon this subject we do claim priority. So far as we know, there is not another writer, either as a standard author or contributor to a medical journal, who claims to have any convincing proofs that atmosphere admitted into joints or other tissues is not generally a source of danger; on the other hand, they all urge, when dwelling upon the subject, that it is a most unfortunate, if not even dangerous occurrence."

THE USE OF SARSAPARILLA IN SYPHILIS.

A number of experiments, instituted to ascertain the therapeutical value of sarsaparilla, in decoction, show beyond doubt that it has not the least demonstrable influence on the course and termination of syphilitic diseases. The decoction of Zittmann (and probably similar compounds containing sarsaparilla as principal ingredient) has some effect, occasionally strong enough to induce recovery, against secondary syphilitic forms treated successfully with mercurial and iodine preparations, or both of them, (papulous or pustulous syphilides, squamous herpes, ulcers of the skin and fauces, affections of the bones.) The effect of the decoction is the same, if no sarsaparilla is added to it. The use of sarsaparilla in syphilis should therefore be abandoned.—Prof. Sigmund, of Vienna, in *Zeitschr. d. Gesellsch. d. Aerzte zu Wien.—Lancet and Observer.*

REVIEWS AND BOOK NOTICES.

Health; Five Lay Sermons to the Working People. By John Brown, M.D., author of "Rab and his Friends," etc. New York, Robert Carter & Brothers. Price 30 cents.

This is a well-timed and well-executed effort to instill popular lessons of duty to the doctor by patients, duty to his patients by the doctor, how to guide and educate children, and other medical

"odds and ends," which every practitioner and every adult patient may read with profit. It abounds in "Canny Scotch" stories, well told, illustrative of much sound instruction. His lectures to the medical man we have found as useful as those to the laymen must be to them. We have room but for one extract:—

"*Run for the doctor;* don't saunter, or go in, by-the-by, as an old elder of my father's did when his house was on fire. He was a perfect Nathaniel, and lived more in the next world than in this, as you will soon see. One winter night he slipped gently into his neighbor's cottage, and found James Somerville reading aloud by the blaze of the licht coal; he leaned over the chair, and waited till James closed the book, when he said, 'By-the-by, I am thinkin' ma hoose is on fire,' and out he and they all ran, in time to see the auld biggin' fall in with a glorious blaze. So it is, too, often when that earthly house of ours—our cottage, our tabernacle—is getting on fire. One moment your finger would put out what in an hour all the waters of Clyde would be too late for. If the doctor is needed, the sooner the better. If he is not, he can tell you so, and you can rejoice that he had a needless journey, and pay him all the more thankfully. So run early, and at once. How many deaths, how many lives of suffering and incapacity may be spared by being in time—by being a day or two sooner! With children this is especially the case, and with workmen in the full prime of life. A mustard plaster, a leech, a pill, fifteen drops of ipecacuanha wine, a bran poultice, a hint or a stitch in time, may do all and at once; when a red-hot iron, a basonful of blood, all the wisdom of our art, and all the energy of the doctor, all your tenderness and care are in vain. Many a child's life is saved by an emetic at night, who would be lost in twelve hours. So send in time; it is just to the child or patient, and to yourself; it is just to your doctor, for I assure you we doctors are often sorry and angry enough when we find we are too late. It affronts us and our powers, besides affronting life and all its meanings, and Him who gives it. And we really *enjoy* curing; it is like running, and winning a race—like hunting, and finding and killing our game. And, then, remember to go to the doctor early in the day, and well as in the disease. I always like my patients to send and say that they would like the doctor 'to call before he goes out.' This is like an Irish message, you will say, but there is 'sinse' in it. Fancy a doctor being sent for just as he is in bed, to see some one, and on going he finds that they had been thinking of sending for him in the morning, and that he has to run neck and neck with death, with all the odds against him."

Such a readable little volume, circulated among our patients, would do good to them and to us. By all means procure several copies and circulate them. The cost per copy is very small, while the advantage to all concerned would be great.

J. H. G.

A Treatise on Gunshot Wounds. By T. Longmore, Esq., Deputy Inspector-General of Hospitals; Professor of Military Surgery at Fort Pitt, Chatham. J. B. Lippincott & Co.: Publishers, Philadelphia. pp. 132. Price 75 cts.

This little manual is printed in a neat and attractive form, but for the surgical practitioner contains little in addition to the large amount of matter already published upon the same subject.

Border Lines of Knowledge in some Provinces of Medical Science. By Oliver Wendell Holmes, M.D., Parkman Professor of Anatomy and Physiology in Harvard University. Boston: Ticknor & Fields, Publishers. pp. 80.

This neatly-printed volume is the Introductory Lecture delivered by Prof. Holmes before the medical class of "Old Harvard," in November last, and, like every other production of his which has come under our notice, is a bold, vigorous transcript of the author's peculiar method of utterance. He thinks and speaks for himself. The question whether his thoughts be orthodox is, to him, of the least consequence. Starting in this little volume with the idea, which he beautifully elaborates in all its pages, that "Science is the topography of ignorance," he does not undertake to determine *how much* progress in knowledge the present age has made, but opens before us the vast area yet unexplored. He brings the reader to the "border lines of knowledge," enthusiastic, perchance, with the prospect of rich discoveries just beyond, and tantalizes him, by exposing his profound ignorance. Thus chemistry, anatomy, physiology, microscopical revelations in both these branches, pathological anatomy, are all passed in review before the reader, each compelled to display its progress in the past, and to lift the vail of the future just high enough to reveal an inkling of the vast area yet unknown and unexplored.

In the branches of medical science which he teaches, Prof. Holmes is enthusiastic, instructive, and suggestive; here he moves steadily on in the line of safe progress. In other departments of medicine he exhibits instability, and lack of solid foundation on which to build a system of therapeutics. Here he treads upon ground of which its tenability seems doubtful to himself, and, unsatisfied with any method of curative treatment yet adopted, because one method has so quickly been superseded by another, he settles for the time being upon the phantasy "that medical *curative* treatment will, by and by, resolve itself in a great measure into modifications of the food swallowed and breathed, and of the natural stimuli."

The *Prussian Gazette* announces that gymnastics are to be introduced as a compulsory branch of education in schools of every degree in Prussia.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, MARCH 8, 1862.

THE SURGEON ON THE BATTLE-FIELD.

The symbolized spot, near a field of battle, where the surgeon is performing his office of humanity, should be a sacred one, around which every sentiment of Christian feeling and true honor and generosity should throw their protecting ægis.—*British-American Journal.*

No language better than the foregoing can convey the true idea of the position of the surgeon upon the battle-field. He occupies "the symbolized spot" around which are gathered the tokens of war's devastation, and to whom, as an angel of mercy, not of wrath, he is to minister. In "performing his office of humanity," he exercises no partiality, save to those who most pressingly need his services to staunch the fast-flowing tide of life, or to bind up the wide-gaping wound. Belligerent he should not be. It is not his mission. No vindictive motive or feeling should be allowed for a moment to enter his breast. With the merits of the controversy waged upon the field of battle between opposing forces he may have his views and his opinions, but these should never influence his duties to the wounded who are committed to his care. Regardless of all other considerations, save the single one, how shall he fulfill his whole duty to whomsoever of war's unfortunate victims shall come under his charge, the eye of sympathy and commiseration should greet all alike, and the overflowing emotions of the heart should find utterance in prompt action to relieve.

Why should the surgeon, whose mission and office is so universally respected, be trammeled with weapons of warfare, or be even expected to defend himself from assault? Aye, will not even the rude hand of savage barbarity be paralyzed as it approaches the "sacred spot" where the humane surgeon bends over the wounded hero? So it was in one of the most sanguinary battles of modern times, when the French were driven back till the enemy reached the tables erected for the use of the surgeons, and where they were then at work. They were not molested. As if afraid the just judgment of Heaven would follow the sacrilege, their labors of mercy were undisturbed. So should it ever be, and so will it be wherever the true mission of the surgeon is properly understood.

There is a vindictive spirit, full of vengeance against all who are found in anywise opposed to them, which would wantonly strike down even an angel of mercy who crossed their pathway; but these are infamous exceptions, and form no criterion of safe judgment for the general mass of humanity. The mass is not thus wanton and cruel. And just in proportion as the idea becomes prevalent that the surgeon is in no offensive sense a belligerent; that he is not a warrior, but a ministering angel; that he is present upon the battle-field not to mingle, sword in hand, in the carnage of war, but to tender to those who fall the sympathy and assistance they need, the "spot" where he plants his standard will be held "sacred" by all.

And why should it not be? It is the "symbol" of humanity. On no other place in all the wide waste of battle can the eye rest with any satisfaction, and here only, as it is the oasis of humane offices and attention.

In our own unfortunate war it is lamentable that the mission of the surgeon is not better understood by both combatants. Instances have occurred in which surgeons of both contending parties have been taken, and, in some respects, treated as prisoners of war, and subjected to all their privations and hardships. In one or two instances surgeons have been shot while in the performance of their duties, thus demonstrating that we have not yet fully comprehended the surgeon's mission upon the battle-field. He should be exempt from seizure as a prisoner of war, or, if arrested, he should be at once released, unless there are some special reasons against it. No arm should be raised to strike him down. His life should be held as sacred as that of the minister of God. As in his private practice he is bound in honor to keep inviolate the secrets freely imparted to him, so upon the battle-field he should be a man of deeds not of words. Loyal to his country he should ever be; he should also be loyal to his profession and to all the interests which come under his cognizance.

In this connection we are pleased to observe that in one department of our military operations, that of General Buell, orders have been given that the surgeons of the enemy shall not be disturbed on the field. What a relief to the horrors of the sanguinary conflict does such an announcement give, and what an evidence of triumph for struggling humanity in the bosom of the hardy veteran! Henceforth the surgeon's "symbol" shall be the signal to turn the tide of

war away; nay, before it the conflict shall cease. Why may it not be so in all the military departments of our country, both North and South, and the surgeon thus become the ministering angel, bringing comfort and blessing to the wounded, whose life shall be held sacred?

Why, also, should not a like provision be adopted as a part of the code of international law? Considered merely as a humanitarian measure in which all belligerents are alike interested, why should it not become the law recognized everywhere among all nations, that the surgeon is not to be classed as a belligerent; that his life is to be held sacred; that he is not to be retained as a prisoner of war unless there be *special commanding* reasons therefor; that in all his intercourse between belligerents the same principles of secrecy and circumspection are to govern him as in his private practice, and that he is always to restrict himself to the prompt and humane performance of the duties of his mission? But these are only hints for future consideration.

EDITORIAL NOTES AND COMMENTS.

Pennsylvania College of Dental Surgery.—The annual commencement of this institution occurred on Friday evening last, at the Musical Fund Hall. A large and select audience of the friends of the institution, among whom were many ladies, were present. The Germania Band was in attendance, and interspersed the exercises with some popular music.

The degree of D.D.S. was conferred upon the gentlemen whose names are given below. We give also their residences and the subject of their Theses:—

Horace A. Coe, New York, the Salivary Secretions; M. Frank Carll, Rhode Island, Orthodontia; Daniel W. Gehr, Maryland, Alveolar Abscess; Alfred T. Goodell, New York, the Importance of the Human Teeth; Charles A. Hastings, South America, Impressions, Dies and Counter-Dies; Elwood E. Hopkins, Pennsylvania, Causes of Imperfect Development of the Teeth; Augustus S. Kidder, New Hampshire, Development and Structure of the Teeth; Henry Leibert, Pennsylvania, Physiology of the Human Teeth and Digestive Organs; Theodore G. Lewis, New York, Tin and its Applications; Samuel Marlor, England, Reasons why a Dentist should understand Anatomy; Samuel K. Palmer, New York, Neuralgia Facici, and Remedial Treatment; Joseph L. Perkins, Vermont, Salivary Calculus; Frank N. Shepherd, Maryland, Anatomy and Physiology of the Tongue; Sparkman R. Screven, South Carolina, Carbon; C. Longstreth Smith, Connecticut, Fluids of the Mouth; Joseph F. Vegas, Louisiana, the Causes of Imperfect Development and Early Decay of the Teeth; Ernst L. Witte, Germany, the Dental Pulp; Joseph R. Wetherill, New Jersey, Diseases of the Antrum; N. B. Welton, M.D., Connecticut, Articulation of Artificial Dentures.

The valedictory address was delivered by J. L. Suesserott, M.D., D.D.S., Professor of Principles of Dental Surgery and Therapeutics, and contained many practical hints of great value to the dental practitioner. The principal feature of success, he urged, in any profession, and especially in the medical or dental, is a fixed determination to succeed, and strength enough of will and purpose to avoid being drawn aside by tempting offers of temporary advantage. And if you add to these, urbanity of manner, force and energy of character, you have the elements necessary to the attainment of a high position in the practice of dental surgery. The address was well received by the intelligent audience, and portions of it were greeted with applause.

We are pleased to see the dental profession thus enforcing its claims to recognition among the branches of legitimate medicine, and we trust the day is not far distant when quackery in that department shall be considered as disreputable as in any other department of medical science.

From the report of the demonstrator, Mr. D. H. Goodwillie, we learn that in the operative department the following operations were performed on 620 patients: Gold fillings, 454; tin fillings, 325; temporary fillings, 11; amalgam fillings, 7; treatment and filling of pulp cavities, 113; superficial caries removed, 15; extraction of teeth and roots, 2464; removal of salivary calculi, 75; pivot teeth inserted, 13; treatment of inflammation of the gums, 20; ditto of alveolar abscess, 44; ditto for irregularities, 51; ditto for necrosis, 3; removal of tumors, 2. Total 3597.

In the mechanical department, which was under the direction of J. J. Griffith, as demonstrator: Whole sets of teeth, 18; upper sets, 31; whole set block teeth, 1; whole upper sets, block, 3; partial sets of single teeth, 20. Whole number of teeth mounted, 1210.

Jefferson Medical College.—The closing lectures of the course at this institution took place on Friday last. Dr. Charles D. Meigs, who has been connected with the college for some twenty-five years, resigned his position as Emeritus Professor of Obstetrics and Diseases of Women, and bade farewell to the class and to the active duties of the profession. The earnest and impressive manner in which he reiterated the opinions long since laid before the profession in regard to the treatment of puerperal fever, if it did not enforce conviction of the entire soundness, therapeutically, of the practice the doctor advocated, will, nevertheless, not soon be forgotten, and his words are more vividly impressed on the memory of those

who heard them than they could be by reproducing them here.

Dr. Meigs was followed by Dr. Dunglison, who, as the closing lecture in his interesting department, gave an elegant and classical disquisition upon death. He alluded, in fitting terms, to the kindly relations existing between himself and the students during the term, wishing them all a happy return to their homes, and a long career of usefulness in the benign vocation they had chosen, which blesses alike him who gives and him who receives.

The public exercises of commencement take place, we understand, to-day. The valedictory address will be delivered by Dr. Dickson.

Pennsylvania Hospital for the Insane.—The report of this institution, for 1861, is before us in a neatly-printed pamphlet of forty-four pages. It has two distinct departments, one for each of the sexes, and another year's experience has confirmed the conviction of its great advantages over any other arrangement.

The total number of patients in the hospital during the year was 456; the average number under treatment was 275. The number in the male department during the year, 247; in the female, 209; number at the date of the report was 128 and 127. The number discharged "cured" was 92—of each sex equal; "much improved," 14; "improved," 34; "stationary," 32; "died," 29. Since the establishment of the hospital in 1841, 3753 patients have been admitted, and 3498 discharged. Of the occupations of those admitted we find the largest number credited as "farmers and laborers," 439; the "professions" send only 98; "teachers and students," 100; "merchants and clerks," 336; thus showing a vast disproportion against what has generally been considered the most healthy occupation of life. The same anomaly is also found among the female patients: "domestics" furnish 203; "seamstresses," 182; "daughters of farmers and laborers," 105; "wives of ditto," 274; "widows of ditto," 55; a larger number than the "professions" or "teachers." Among the "causes of insanity," 601 cases are referred to "ill health of various kinds;" 243 to "intemperance;" 140 to "loss of property;" 193 to "grief, loss of friends;" 137 to "religious excitement;" 237 to "mental anxiety," etc. etc.

The gardens and pleasure grounds of the hospital have been improved during the year, and the patients are more of them enabled to take daily exercise in the open air. A series of evening entertainments, instruction and amusement, have been given three times a week, occupying two hundred and fifty evenings of the year. A portion of the patients are also engaged in mechanical pursuits, and in cultivating and adorning the ample grounds of the institution. And thus everything which can aid in promoting cheerfulness and tranquillity, and thereby contribute to remedy the aberration of the intellectual faculties, is provided for the unfortunate patient.

The superintendent, Dr. Kirkbride, remarks, very correctly, in relation to hospital economy, that "the true economy consists in an avoidance of all waste, in having nothing done that is not useful in some way, in keeping everything in the highest state of efficiency, and doing all that is likely to restore to society its afflicted citizens in the shortest possible time." And in accordance with this principle everything connected with this hospital seems to be conducted.

Free Incision of Tonsils in Diphtheria.—Dr. S. J. Parker, of Ithaca, N. Y., writes us as follows on this subject:—

"Before I read the extract of a letter from Dr. McIntosh, of Nova Scotia, in the January 4th, 1862, number of your journal, I had noticed that at least some cases of diphtheria commence in the tonsils; next follows the bags of water on the uvula; and last, the fatal diphtherous membrane in the trachea. In one case, I was about to announce the hopeless prognosis of a young lady to her friends, when the favorable position of the tonsil induced me to lance it through and through a half dozen times, with a bistoury; cutting, also, the bags of water on the palate. I called the next morning expecting a fatal issue, but was happily disappointed in finding the laborious suffocating breathing gone, and the patient saying, 'I have spit up a good deal, and feel better.' She rapidly recovered.

"Several other extreme cases confirm me in the *through and through lancing* of the tonsil, one or both as required. I have no faith in the usual iron preparations; often they are vomited, unchanged, just before death. But my main hope now is in *excessive* (for the age) doses of quinine and nitrate of potash. The nit. pot. should be given by the ounce, not grains, daily. Belladonna is more valuable than the chloride of iron."

Filthy Water.—An endemic of diarrhœa of a very obstinate character is now prevailing in a section of this city, and is said to be confined to that portion which is supplied with water from

the Delaware River through the Kensington Water Works.

There have been, at intervals, for several years, repeated complaints of the filthy and offensive character of the water supplied to the northeastern portion of the city, and efforts to purify the water in the basins have frequently been made. Such purification is, however, but temporary, as the water is drawn from the bed of the river, near to the shore, and a vast amount of foul sediment is necessarily taken up by the pumps. The matter needs immediate attention from Councils and those having authority in sanitary matters.

It is said that the vile condition of the water is owing to the fact that the fire-plugs throughout the section of the city thus affected are rarely opened, and have never been thoroughly so since the consolidation of the city. If this be the fact, it may easily be remedied.

Remedy for Nursing Sore Mouth.—Dr. G. A. Moody, of Plainville, Connecticut, sends us the following recipe for this troublesome affection :—

℞.—Red iodide of mercury,
Iodide of potash, āā ℈ss ;
Pure water, f℥ij. M.

Dose, four drops in a little water, three times a day.

He also uses it as a gargle, taking six drops of the solution to one-third of a tumbler of water, gargling the mouth or throat with it every three or four hours. He says "almost immediate relief is afforded to the smarting sensation of the throat and mouth." He is indebted for the above to an article in *Wood's Retrospect*, published in New York some years since.

Bebeerina in Menorrhagia.—This article, which is the active principle of the Bebeeru tree, which grows in British Guiana, and possesses properties somewhat similar to cinchona, we observe is gaining some celebrity in the treatment of menorrhagia. The formula for its administration is the following :—

℞.—Bebeerinæ sulphas, gr. xij ;
Pulv. cinnamomi, gr. xviij ;
Pulv. ferri, gr. vj. M.
Ft. chart. xij.

One of these to be taken every other day during the interval between the menstrual terms. During the flow, especially if it be profuse, the remedy should be given oftener, and in larger doses. As a remedy, in cases of simple uncomplicated menorrhagia, this article possesses merits which are worthy of note.

Medical Provision for Railroads.—We have received an ably written paper, read before the New York State Medical Society at its late session by Dr. Edmund Arnold, of Yonkers, N. Y., which we shall endeavor to notice in our next issue. Meanwhile, to enable the reader more fully to understand that portion of the proceedings of the New York State Medical Society referred to in the report of the committee, of which Dr. Shrady, of New York, was chairman, (Reporter, Feb. 22, p. 479,) we quote the resolution itself, and state that it was occasioned by the paper of Dr. Arnold mentioned above :—

"*Whereas*, this Society has heard that a measure is about being introduced into the Senate, of which an especial feature is thorough medical provision for railroads; and,

"*Whereas*, we believe that much loss of life and limb results from the want of such proper provision ; therefore

"*Resolved*, that we hail with satisfaction the introduction of any plans calculated to secure so desirable an end."

NEWS AND MISCELLANY.

Philadelphia County Medical Society.—At the annual election for officers of this Society, the following gentlemen were elected : *President*, Dr. Alfred Stillé ; *Vice-Presidents*, Dr. Joshua H. Worthington, Dr. Henry Hartshorne ; *Recording Secretary*, Dr. William B. Atkinson ; *Assistant Recording Secretary*, Dr. A. H. Fish ; *Corresponding Secretary*, Dr. James M. Corse ; *Treasurer*, Dr. Andrew Nebinger ; *Censor*, Dr. George Hamilton.

Northern Medical Association of Philadelphia.—The following are the officers of this Association, elected in January, 1862 : *President*, Dr. Owen Osler ; *Vice-President*, Dr. Alfred M. Slocum ; *Recording Secretary*, Dr. Wm. B. Atkinson ; *Corresponding Secretary*, Dr. Wm. Mayburry ; *Reporting Secretaries*, Dr. Samuel N. Troth, Dr. Wm. B. Atkinson ; *Counsellors*, Dr. N. L. Hatfield, Dr. Charles Wittig, Dr. John Rhein, Dr. Lewis P. Gebhard, Dr. Joseph R. Bryan.

City Railways.—The net earnings of the city railways for 1861 was $1,077,120 84; expenses, same time, $543,893 85 ; net surplus, $523,226 99. An enormous profit for an indispensable accommodation.

Oiled Paper as a Substitute for Oiled Silk in Surgical Dressings.—A writer in the *Boston Medical Journal* says that in the Glasgow Royal Infirmary he has seen *oiled paper* efficiently substituted for oiled silk in surgical dressings.

"The following is the mode of preparation :

Take good 'tissue' paper, free from holes, as many sheets as may be required; boiled linseed oil, say one quart; to which add one ounce sulphate of zinc, and reboil for an hour or longer. A little beeswax and turpentine may be added, while the oil is hot. Use a square board, larger than the sheet of paper. Coat the first sheet on *both* sides with a broad paint or paste brush; the rest of the sheets only require to be coated on one side, as the oil strikes through. Place the second sheet on the top of the first, slightly projecting at one end, for convenience of lifting, and so on, *seriatim*. When all the sheets are coated, hang them up to dry in a moderately warm place, for twenty-four hours. When taken down, each sheet may be dusted over with French chalk, which will prevent them from adhering. If sufficient wax and turpentine have been used in the mixture, the chalk dusting will not be needed.

"Dr. McGhie, in his pamphlet, claims the following advantages for oiled paper as compared with silk:—

"1. *Economy.*—A sheet costs from one to two cents only.

"2. *Transparency and lightness.* — Applied over a stump or other cut surface, when hemorrhage may be feared, the state of the part can be more readily seen. On account of its lightness, it is particularly useful in covering extensive burns.

"3. *Adaptability.*—It can be nicely applied to any part, retaining the form impressed upon it. It is easily torn, while, at the same time, it can be made of any required strength by doubling or trebling it.

"4. *Safety.*—The great objection to oiled silk (or even to gutta-percha sheeting) is, that the expense tempts us to use it over and over again; and in this way disease is propagated. There would exist no such temptation with oiled paper, as it could only be used *once*, and all risk of contagion in this way would be avoided."

Confederate Navy Surgeons.—Wm. F. Patton, W. A. W. Spotswood, L. W. Miner, Wm. F. McClenahan, D. S. Green, John T. Mason, Wm. B. Sinclair, R. F. Mason, Jas. F. Harrison, J. W. B. Greenhow, D. B. Philips, J. Ward, Wm. F. Carrington, C. H. Williamson, Arthur M. Lynch, Wm. E. Wysham, D. B. Conrad, Fras. L. Galt, H. W. M. Washington.

Assistant Surgeons. — A. L. Garnet, F. Van Bibber, J. W. Sandford, Jr., Thos. J. Charlton, Chas. E. Lining, M. P. Christian, R. J. Freeman, B. W. Green, Jno. D. Grafton, Chas. M. Morfit, Theodosius B. Ford, R. R. Gibbes.

The Massacre of the Innocents in London.— The enormous mortality of children continues to be a great stain on the honor and a heavy burden on the conscience of the nation. It arises from causes of which many are beyond the control of the health officer, who, however, should never cease to perform the duty of pointing to the blot. In the metropolis this quarter, according to the report just published, the numbers are in the annual proportion of 23·1 per 1000 of the inhabitants of the Eastern district, 23·6 of the Western, and 21 of the Central, making together an annual death-rate of 22·4 per 1000 for the entire city. The average mortality in all England during the autumn quarter is at a yearly rate of 21·8 per 1000, and in the chief towns of England it is 24·9. Thirty-eight per cent. of all the deaths were among children of less than 5 years of age, and nearly 20 per cent. among old persons of 60 and upwards; 13 per cent. were among adults at from 20 to 40 years of age, and 19 per cent. at from 40 to 60. These are nearly the proportions of former years. Looking, however, at the numbers which have contributed to this aggregate, it will be observed that the mortality at different ages in the several districts of the city has not been equally distributed. In the Eastern district, for example, the mortality of children has been 50 per cent. of all the deaths, whereas in the Western it has been only 36 per cent. Both of these divisions of the city have nearly the same kind of population, and we cannot point to any especial cause for this high death-rate of children in the first-named district but the great density of the population. In the Eastern district there are 266 persons to an acre, whereas in the Western there are only 200, and in the rest of the city but 105. In the whole of the metropolis, with a density of only 36 persons to an acre, the mortality of children under 5 years of age is nearly 42 per cent. of all the deaths. What wonder, then, that in a district so closely packed as the Eastern the infant mortality should rise to 50 per cent!—*Lancet.*

The statue of Dr. Jenner, of small-pox vaccination celebrity, has been removed to Kensington Gardens. It is placed on a new pedestal in the vicinity of the stone bridge spanning the Serpentine, on the Bayswater side. This statue, it will be remembered, was some time ago promoted to a distinguished place near the Nelson Column, in Trafalgar Square.

The Twelfth Annual Commencement of the New York Medical College and Charity Hospital was held at the College building in Thirteenth Street, New York, on Tuesday evening last. Eleven gentlemen received the Degree of M.D.

DIED.

Felton.—February 26th, at the residence of his brother, near Chester, Delaware County, Pa., Cornelius Conway Felton, LL.D., President of Harvard College, aged 54 years.

Phillips.—In Pennington, N. J., on the morning of the 4th inst., of erysipelas, Miss Josephine E., eldest daughter of Dr. John H. and Elizabeth A. Phillips, in the 22d year of her age.

Pollard.—In Richmond, Va., on the 20th ultimo, aged 34, Dr. James Rives Pollard, of Virginia, for several years past a resident of South Carolina.

Rowe.—On the 26th ultimo, at the residence of his son-in-law, A. Sperry, in Horsham Township, Montgomery County, Dr. John Rowe, aged 63.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, No. 282. PHILADELPHIA, MARCH 15, 1862. New Series, Vol. VII. No. 24.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

Aphthous Cachexia.

By A. C. Campbell, M.D.,
Of Mount Morris, New York.

This is a disease that affects assimilation, and is accompanied with functional derangements and changes of structure of the mucous membranes lining the whole track of the prima viæ. I do not know that writers apply the term cachexia to this disease, but when it is considered how common it is, and how often it prevails in certain localities, and that, too, without changing its character by any other than functional derangements in distant organs, and its effects upon general nutrition, we cannot fail to recognize in it all the elements of an idiopathic disease. That it is a cachexia in the strictest sense of the word, I think no one will deny; that it is not tuberculous cachexia, is evident from the fact that it may last for years in a marked degree, without resulting in tuberculosis, or any other scrofulous affection. It is true that phthisis pulmonalis is very often the sequela, but it is where the strumous diathesis was an original vice, existing long before this disease showed itself; neither can it be pretended that it is in any way allied to syphilitic or cancerous cachexia; hence the propriety of the term *aphthous* cachexia.

It may exist as an idiopathic or symptomatic disease. It has a tendency to prevail in certain localities, and to affect persons of peculiar constitutions.

Its cause, whether external or internal, whether depending on imperfection of organism, or acquired by surrounding influences, must act by lessening vital force, and especially the functions of the nerves of organic life.

The influence must be persistent, acting with sufficient moderation, and enduring for a length of time necessary to produce its morbid impression; the tendency of which is to extend and diffuse itself over the whole mucous structures, irritating the mouths of the ducts of secreting organs, entering these ducts, and in the end operating by sympathy, or in a direct manner upon the intimate structure of the organs themselves.

When a certain amount of impression has been produced by the morbific agent, the organ most liable to become diseased in a given case begins to show evidence of its presence, and from it as a focal point it travels by continuity of structure, and by exciting distant sympathetic action, changing secretions, which irritate, and even seem to corrode the surfaces over which they pass; affecting, by reflected irritation, the spinal nerves and brain, as well as the system of organic nerves.

At the same time, while it influences the whole nervous system by direct and reflex action, it works changes of structure in the *hollow* viscera, deeper than the mucous surfaces, including the œsophagus, stomach, bowels, ducts of the secreting organs, and, in fine, the intimate structure of the organs themselves. In strumous constitutions, let the disease commence where it will, the lungs oftenest "fall" into fatal disease when the powers of the system are kept depressed for a sufficient length of time. The early symptoms of this disease are modified by age, sex, and condition of person so attacked; they may be divided into four classes, namely, children, adult males, females *neither* enceinte nor nursing, females enceinte or nursing. When the nursing child is attacked, the first symptoms are restlessness, a disposition to drool, as in teething, is more inclined to vomit than usual, nurses voraciously at times, and in turn entirely refuses the

breast; the bowels are irregular, being sometimes costive, and at other times relaxed; the substances ejected by vomiting, and that passed at stool are variable in appearance, as well as in their reactions, being sometimes alkaline, and again acid, as the disease affects most severely the salivary glands, liver, and pancreas, or the lining membrane of the stomach, or the glands in the region of the cæcum. While these general symptoms are in progress, and very soon after their commencement, on inspection of the inside of the cheeks and the surface of the tongue, aphthous sores or patches will be found of greater or less extent, according to the severity of the cause or the predisposition of the patient.

Through the agency of the constitutional disturbance, and the local eruption, the patient loses flesh and healthy color, and, unless relieved, the mesenteric glands become diseased, or the mucous membrane of the bronchia are attacked by aphthous inflammation, and very soon after the commencement of the irritation of the ducts in the one case, or the aphthous condition of the mucous membrane in the other, tubercular matter is deposited in these organs, and tabes mesenterica or phthisis pulmonalis carries off the patient; again, the force of the disease is spent upon the mucous surfaces of the alimentary canal, and the secreting organs emptying into it, producing chronic vomiting, obstinate diarrhœa or dysentery, and in the end both functional and *structural* disease of the secreting organs and surfaces, increasing secretion, and modifying its properties—in some diminishing, and in others annihilating it. Again, the anæmic condition that is induced by impaired digestion and diminished lacteal absorption affects the cartilages and bones, laying the foundation for an endless variety of distortions of the spine, and disease of the large joints, as well as a great variety of skin diseases, together with a diseased condition of the whole system of lymphatic vessels and their associated glands.

In the male adult the symptoms and course of the disease are somewhat different, though the difference depends more upon the difference in the causes than is found to exist in the disease—the same state of nervous depression exists in each case, and the disease is of the same tardy, universal, and insidious nature. In this class of cases we have the patient's description of his feelings, which better define the incipient stage, as well as his appearance to guide us. His first complaint is of general ill health, a saltish or peppery taste in the mouth, and a burning sensation in the stomach; food and drink lose their accustomed taste; the appetite becomes capricious; more or less thirst is complained of; the skin is dry and sallow, having a peculiar dead and doughy appearance, and has the soft feel of oiled silk, but more dry than in health; the adipose tissues become absorbed; the skin sinks into the interstices between the muscles, seeming to adhere to them. While the external appearances are in progress, the mouth, tongue, and throat exhibit aphthous spots, differing from the preceding case in having portions well defined, where the membrane looks to be entirely taken away by absorption, (as if cut out with a "punch,") or eaten out by some corrosive substance, leaving the margins of the remaining membrane that surrounds these patches as perfect and smooth as in health; there is no effusion of lymph upon their surfaces, nor any incrustation as in the former variety.

From the sensation of heat in the stomach and pepperish taste in the mouth and œsophagus, that precede the other symptoms, we are led to infer that the same aphthous condition of the mucous membrane of the stomach existed before it did in the mouth. The condition of the bowels differs somewhat from the former variety; there is more persistent costiveness in the early stage, and more uncontrollable diarrhœa in the later; indeed, there is reason to believe that many of the cases of chronic dysentery, in which there is ulcerative disorganization that resists all treatment, are due to this cause. Again, the glandular disturbances are more obstinate than in the infant. If the liver is torpid, or its secretions vitiated and excessive, it is much more difficult to remedy, and the changes that are wrought in the alimentary canal are more marked and more difficult to cure.

In the non-pregnant female not nursing, the symptoms are nearly allied to those in the adult male, except that they seem to be largely influenced by the menstrual function. In many cases the mouth only becomes sore at the monthly periods, the disease disappearing as soon as the menses subside. The aphthous condition that affects the adult male in the prima viæ only as the original disease, in the female attacks the organs of generation as well as the prima viæ; and by the close sympathy that exists between these organs and the rest of the system it works out lasting and serious trouble, that tells fearfully upon the general health, which was already im-

paired by the existence of the disease in the stomach and bowels previous to its locating in those organs.

In estimating the effects of the disease upon the two sexes, we should take into consideration the fact that the nervous system of the female is much more sensitive to morbid impressions, and that while the nerves of organic life seem to be more deeply implicated in the early stage of this disease, its continuance for any great length of time cannot fail to affect, through their different twigs, the spinal column and brain, through which a series of reflex nervous symptoms are set in motion that obscure by their intensity all other considerations in the case.

In the enceinte or lately delivered and nursing female, the symptoms are variable—from a mild and completely controllable salivation to the most helpless state of anæmia. It generally commences like the other forms already enumerated, either a few days before confinement or very soon afterward, and, like them, is preceded by a burning sensation in the stomach; more or less ptyalism; aphthous patches in the mouth and throat, though much more painful and acutely inflamed than in either of the former varieties; the bowels become diseased much earlier; the circulation becomes rapid; the secretion of milk is arrested; the lochial discharge ceases; there is profuse perspiration over the whole surface; respiration becomes embarrassed; the patient complains of great thirst and a feeling of heat and suffocation; there is loss of appetite; vomiting and diarrhœa soon follow; and very soon, if not relieved, she passes into a condition resembling the stage of collapse in cholera, and death closes the scene. This is a short picture of the more rapid form of the disease—the milder ones occurring from the simplest form referred to, up to the more grave just described; and the symptoms vary according to the severity of the attack.

The pathology of this disease is to be studied mostly by its effects upon *the glands* that empty their secretions into the prima viæ; *the circulation* by which they are nourished and from which they secrete, and *the muscular* as well as the *mucous coat* of the alimentary canal.

In treating of the symptoms as they occur in the infant, enough has been said to give an idea of its pathology. In the adult male the condition of the mouth and fauces have been already alluded to, and need no further notice here. The changes that are produced in the œsophagus and other portions of the alimentary canal are often of more serious consequence. Aphthous patches occur as in the mouth, and, continuing for a length of time, being necessarily irritated by the passage of aliment, etc., soon become more and more sensitive, the nervous irritation causing muscular contraction around the sensitive point. While there is relaxation above, the muscular fibers increase in size and number, become somewhat indurated, and the result is narrowing, if not entire closure of the canal, the ultimate results of which depend upon the location and extent of narrowing.

In the glandular system we *sometimes* find only slight functional derangement; again, the most destructive disorganization. The force of the disease seems to be spent more frequently and more markedly upon the liver than any other organ. The first change that is observed is inflammation and thickening of the duct leading to the gland, which, by sympathy first and then by continuity of structure in the mucous linings, travels into the intimate structures of the organ, increasing its secretion, on which account *it* is rendered very vitiated, and later, diminishing and annihilating it, causing functional changes which induce changes of structure as the disease proceeds; the minute terminations of the bile duct become obliterated, and the outlet of the bile being closed the thinner portions are absorbed and carried back into the circulation, while the *picromel* is left, giving to the liver a peculiar yellow appearance. Sometimes the organ is greatly hypertrophied and has much the appearance of malignant disease. Again, it is found atrophied. What is true of the liver, and the manner in which it becomes diseased, is also true of the pancreas. The spleen, too, is almost always found changed in color and size. The amount of change and the number of organs implicated is dependent on the length of time the disease has been in progress, as well as the predisposition, constitution, and mode of life of the patient. In the female non-pregnant nor nursing, in addition to the changes occurring in the male, we find the uterus and its annexæ more or less diseased both in function and structure; often there is nothing more than aphthous patches on the cervix uteri, which we find hypertrophied; again, we find the whole body of the uterus enlarged and the lining membrane studded with aphthous sores or uniformly inflamed; the inflammation, as in the ducts of the secreting organs, passing by continuity of

structure through the Fallopian tubes, reaches the ovaries and there produces a great variety of changes to which these organs are subject. In the pregnant or nursing female, the condition of the nervous system, of the uterus—indeed, the whole puerperal state, has a *character* that is imparted to all the changes that pre-existed in the system; this character I shall not attempt to define, but shall call it the puerperal state. The causes of this disease are usually of a kind that act slowly and silently, and its foundation is often laid before the patient recognizes the signals that nature hangs out to tell what is going on.

Whatever tends to impair the powers of the nervous system, or affect the organs through which it acts to produce the phenomena of organic life, tends to produce this disease—the use of *water* taken from a clay soil, tobacco, coffee, and malaria, are among such causes. In children the most frequent causes are teething, improper diet, poor ventilation, want of cleanliness, and the use of water spoken of above; while in the adult male, malaria, tobacco, bad diet, water from a clay soil, coffee, and hard labor, are the most common.

In many localities in the West and Southwest where there is much clay soil and the atmosphere is loaded with malaria, this disease is most prevalent; and when an individual's nervous system has become prostrated, spirits broken, his physical and mental energies so nearly extinct that he can scarcely be said to live, *he is said to be acclimated.*

In the unimpregnated female the same causes obtain, and, in addition, the many uterine derangements to which she is liable—in many instances, if they do not precede the other causes—very soon after the accession of the disease they enter largely into the causes that tend to extend and perpetuate it. That such would be the case we might expect, when we regard the intimate sympathetic relation that exists between the uterus and stomach, and the effects produced through the stomach upon the other organs that are assisting in the assimilation of nutritious elements, as well as the uterine sympathy with the spinal column and brain.

In the pregnant female the abdominal viscera are more or less enfeebled, caused by the diversion of nerve power, which is "*called off*," by the new action going on in the uterus, to that organ. Thus we see in many females a pallid look and an enfeebled state of the whole system during the period of gestation; and when that occurs in a constitution naturally feeble, or where there was some disease of the cervix uteri, but not sufficient to prevent pregnancy, it is then, when the fœtus has become somewhat developed and the nervous energies begin to flag, that this cachexia is developed, through the stimulus, it may be, of some of the above-mentioned causes. *Here it is that the disease advances most fearfully.* Or if the system bears up through the period of gestation, *when it undergoes the shock of confinement, and then is taxed with the state of lactation,* particularly if any of the causes spoken of before are affecting our patient, especially the using of water from a clay soil, then it is that we get puerperal anæmia in its *highest perfection.*

In reference to water from a clay soil, spoken of so frequently, I would say that it contains properties which are so intimately in solution as not to be changed or precipitated by any degree of temperature—by being mixed in bread, or used in the preparation of tea and coffee; the system cannot appropriate it, therefore it becomes an irritant, which, when constantly applied to the mucous surfaces, cannot fail sooner or later to induce disease. Malaria, though operating in a different manner—for it poisons the system through the lungs and skin, by *depressing* the nervous energies, thus lowering vitality—in the end produces the same results.

In the diagnosis of this disease, the history of the case and the appearance of our patient will generally go far toward distinguishing it from an idiopathic-organic disease, either acute or chronic. In acute diseases of the stomach, bowels, liver, or any organ, the symptoms are more circumscribed, and the disease terminates sooner either in resolution or death.

This disease, if unchecked, goes on and on, gathering strength slowly but surely, widening the breach made in the healthy tissues, or entirely monopolizing the assimilative function; there is a peculiar color to the skin, particularly if the disease has made some progress, it is pale with a slightly *tawny* color—it feels smooth, soft, and dry. The prognosis is generally favorable, if the patient is situated so as to secure proper medical advice and treatment early, and is willing to submit to the necessary regimen.

The indications to be fulfilled in the treatment of this disease are, as in all others, first to remove the cause, then to assist nature in restoring a healthy equilibrium between the organs. In

the infant the health of the mother or nurse should claim our first attention, for if the child draw nourishment from an unhealthy system, or if such nourishment be deficient in any of its important elements, the child is sure to suffer. If the patient reside in a malarious district, the sooner a change is made for a healthy atmosphere the better. Both mother or nurse and child should use filtered, rain, or soft water for all purposes, both internal and external; the nourishment of mother or nurse should be particularly noticed, and exposure and fatigue guarded against. If the child be teething, attend to the state of its gums, and if necessary freely incise them — touch the aphthous sores in the mouth and throat with nitrate of silver, or use a lotion of chlorate of potash, ten grains to an ounce of water; apply it by means of a camel's-hair pencil morning and evening; if there is vomiting, and the ejections are exclusively acid, alkalies and absorbents should be freely given; if the fluids from the stomach be alkalescent, one of the mineral acids should be administered, either nitric or muriatic acid largely diluted; in either case mucilages may be administered with marked benefit; if the vomiting is excessive and the alvine dejection copious, clay colored, and having the smell of "rotten eggs," (sulphuretted hydrogen gas,) the skin dry and harsh, the tongue moist and covered with a white mucus, while by its cries and moans, its frequent change of position, drawing up of the knees, etc., indicative of severe pain, *showing a case of cholera infantum*, mercurials should be given, either in the form of calomel or mercury with chalk, until the stools are colored with bile; then follow with alkalies in order to neutralize any excess of acid that is almost always generated, the union of which with the bile causes green-colored stools, which irritate the mucous linings of the intestines over which they pass. The mercurial should be followed, as soon as it has produced a change of color in the stool, with some gentle purge, such as castor oil, rhubarb and soda, or magnesia, in order to carry off as soon as possible the acid and vitiated secretions, and to avoid the irritation to the bowels that would ensue if left to pass off unaided. An occasional warm bath, as well as hot fomentations to the bowels, are very grateful to the feelings of the patient and most truly beneficial; after this, small doses of Dover's powder, with tannin or kino, may be given to hold the bowels in check, and to relieve the vomiting and quiet the irritability of the stomach and bowels. A quarter grain of calomel rubbed up with a little dry loaf sugar may be sprinkled upon the tongue; at the same time mucilages should be freely exhibited. Children of a scrofulous habit, and inclined to marasmus, will be better treated by vegetable alteratives and iodine, followed by the bitter tonics and mineral acids, the exhibition of which should be varied from time to time according to circumstances in each individual case.

There are children who seem born with this cachexia, and which appear consequently of defective organization; any attempt to supply this deficiency by remedies will, as it always has, prove futile. For such sufferers a change of air, soft water, simple nutritious diet, with stimulants and tonics, as the patient can bear them, removing all unhealthy influences, and relieving temporary ills by appropriate treatment, will, in my opinion, give the patient the best and only chance to recover what nature has seemingly denied him.

In the adult male the disease has often progressed until many organs are implicated before a physician is consulted; indeed, it would seem as though several diseases were being developed at the same time, and which might be looked upon by a superficial observer as idiopathic diseases, affecting the several organs, but which, upon a more careful examination, may be traced to the diseased mucous membranes; the vitiated secretions from which continually aggravate the constitutional symptoms. The indications then to be met are, after removing as far as possible all causes that have aided in producing this diseased condition, to soothe mucous irritation, correct the morbid secretions, and thus send healthy impressions to the glandular system, both through sympathetic connections and their lining membranes. To accomplish this, mercury may be given, but it must be with great caution; its well-known effect is to increase and vitiate the secretions, and thus it may be readily understood that if improperly used it will do much harm. It should be given at considerable intervals, combined with some narcotic, and the products of its action should be neutralized and carried off as speedily as possible, as spoken of above. A pill composed of Mass. hydg. gr. iv; Ext. hyoscyami, gr. j; Pulv. ipecac. $\frac{1}{4}$—$\frac{1}{2}$, will generally be well borne, once or twice a week, on going to bed. Tartarized antimony, in minute doses, so as to

operate silently and slowly, continued for a long time, always protecting the stomach and bowels by the use of mucilages, keeping the bowels regularly open with mild laxatives, and neutralizing any excess of acid or alkali that may be generated in the stomach or bowels, thus endeavoring, as far as possible, *to establish that harmony between the organs that exists in health.* While this internal treatment is in progress, counter-irritation should be made over the organ which seems to be the most in fault, and I think it will be found oftenest to be the liver; as soon as this is accomplished, nitro-muriatic acid, in small doses, largely diluted, and the alterative effect of an infusion of tar and blood-root will be found to benefit the patient much; the doses of the blood-root should not produce the least nausea, but as much should be taken as can be borne short of that effect; local applications of nitrate of silver, creasote, or some other astringent should be made to the aphthous sores in the mouth and throat. Chlorate of potash should be given in ten-grain doses, three times in the day; the patient should not be allowed fat meats, rich gravies, or any highly-seasoned article of food; the use of tea, coffee, and tobacco should be most particularly *proscribed.*

In the non-pregnant female, not nursing, the same general treatment is to be pursued as in the adult male; the condition of the female organs should be ascertained in reference to uterine or ovarian disease; if found diseased, whether the history of the case shows it to be primary or secondary, it should receive early attention, the treatment of which the limits of this article will not permit me to detail.

In the pregnant or nursing female, when the disease is aggravated, the patient anæmic, the alimentary canal throughout its whole extent appropriating scarcely any of the nutritious elements taken as food, but continually deriving from the blood those elements which should be retained to supply the waste of the tissues; while, if the patient has been nursing, the lacteal secretion is arrested, the secretion of the liver vitiated or wanting, the kidneys secreting badly, and nutrition at a stand still; in such a case, counter-irritation should be among the first means used, in order to hold in abeyance the internal irritation until other remedies may have time, either temporarily or permanently, to relieve the patient. This may be done by a seton charged with cantharides, or by any other means that is certain and speedy. This done, the same course of treatment may be resorted to as in the other cases, using acids, or alkalies and absorbents, as the case may demand, with mucilages, astringents, and chlorate of potash, if necessary to restore to a healthy state the mouth and throat. Mercury should be prescribed only when *absolutely* demanded, at the same time sustaining the powers of the system by the most nutritious and simple diet, with tonics and stimulants as early as they will safely be borne. When the patient begins to improve—(now comes the "tug of war")—care must be taken not to allow her to get up too soon, though she may be doing *extremely* well, having a good appetite with fair digestion; still it will be found she bears the least exercise very badly till health is fully established. The symptomatic form of this disease is seen in the last stages of tuberculosis, in far advanced cancerous affections and syphilitic disease, in low forms of protracted fevers, in dysentery and diarrhœa; the import of which is that the vital forces are in a state of great prostration, the secretions so vitiated as to be caustic, and the constitutional feebleness so great as to be unable to resist the effects of such morbid matters. In children it is often developed in diseases of the large joints and spine; and usually shows itself in the mucous membrane of the rectum, and about the verge of the anus; while in the adult it oftener attacks the air-passages. Its prognosis is generally unfavorable; the question, however, is wholly merged in the probable or improbable cure of the original disease, and the treatment should be palliative or radical according to these probabilities.

Palatine Defects and their Treatment.

By James E. Garretson, M.D.,
Of Philadelphia.

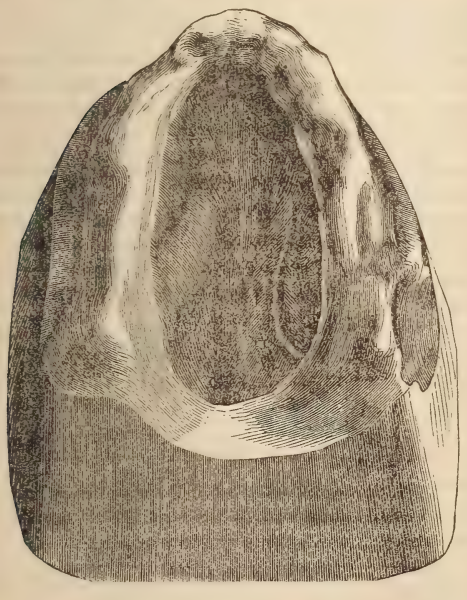
Diseases of the Mouth—*Continued.*

Still another modification of the obturator is that in which the piece is held to its place by a bulb or rim, which passes into the cavity of the break. This adapts the instrument to such cases as have neither teeth nor site for suction, where, for instance, disease has destroyed the whole of the hard palate, leaving alone, as boundaries of the cleft, the alveolar processes and soft palate. Such an obturator, together with the character of cleft for which it is adapted, is happily and truthfully exhibited in the accompanying drawings. Fig. 1 represents the mouth, Fig. 2 the obturator.

This case, together with others which represent modifications of the apparatus as the indications to be met are concerned, are from life, having occurred in the practice of prominent dentists of this city. The models, together with an accompanying history of the cases, were presented to the Pennsylvania Association of Dentists, at a meeting held by that society October 9th, 1860. For the use of the models I am indebted to the courtesy of my friend, Mr. S. S. White, publisher of the *Dental Cosmos;* for the history of the cases, to the reports published in that journal by the secretary of the society, George T. Barker, D.D.S. I am happy in having the opportunity to embody such a report in these papers—first, because of its practical character; and secondly, because it so well exhibits the range of such appliances.

"The first case, as seen in Fig. 1, from the practice of Dr. McGrath & Son, was that of a female

Fig. 1.



over fifty years of age. In this instance the fissure was confined to the hard palate, and was undoubtedly the result of syphilis. Of the history of this case, all that could be obtained was such as was derived from answers to indirect questions which were put to her. They learned that the defect was the result of a disease which commenced as sore-throat, and continued its ravages for over three years before it was arrested; this, together with the appearance of the pharynx and uvula—they being covered with cicatrices, the result of old ulcers—left them without any doubt as to the true nature of the complaint. The parts which had been destroyed during the progress of the disease were the palate bones and the palatine processes of the superior maxillaries, (making an opening into the nose nearly two inches in length and one inch in breadth,) the turbinated bones (with the exception of the middle one on the left side, which is represented in the cut as projecting from the side of the cavity) and vomer, producing an enormously irregularly shaped cavity, extending as high up as the nasal bones, which latter, however, bore no traces of ever having been affected by the disease. The patient, in order to prevent the passage of the food into the cavity during mastication, had been in the habit of filling the opening with a fold of muslin, which answered to a certain extent for that purpose; the velum was entire; the patient had also lost all the teeth of the upper jaw.

"The kind of obturator employed in this case was simple and uncomplicated in its mechanism, Fig. 2. A plate was made to fit accurately to

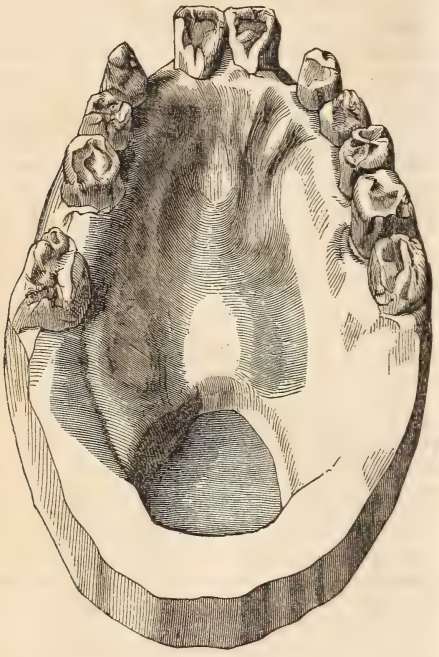
Fig. 2.

the alveolar ridge, extending about the one-eighth of an inch beyond the posterior margin of the opening; also passing in to a distance of nearly an inch, and fitting as closely as possible to the anterior and lateral sides of the cavity. The object of this latter arrangement was to render the plate firm in its position. From the posterior margin of the opening, and extending forward about half the length of the alveolar ridge, was a fold of mucous membrane projecting inward and upward, over this fold; that portion of the plate which was opposite to it was bent. This, together with the suction obtained by the plate fitting closely to the alveolar ridge, enabled the wearer to keep it in its place. The opening was then covered, by soldering to this a second piece of plate, so fashioned as to represent as nearly as possible the form of the lost palate. The object in not extending the plate into the cavity on the posterior edge of the opening was to prevent a lodgment for the nasal secretions, which by their accumulation would prove offensive to the patient. The artificial teeth were then fastened in their proper position, and the apparatus was com-

plete. This obturator the patient has been wearing for about three months; it remains in place and fulfills the office of mastication as well as any ordinary suction plate in a mouth where no defect of the palate exists.

"The second case, Fig. 3, was also that of a

Fig. 3.



female, but the fissure was confined to the soft palate. This, as in the former case, was the result of syphilis. The fissure extended from the posterior opening of the nares through the velum to the palate bones, and was nearly an inch in breadth. The uvula was entirely gone, as well as the lateral half arches, and along with them the palato pharyngei and constrictors isthmi faucium muscles. In this case deglutition was impaired to a great extent; the food would pass into the nares, and the fluids would also pass into the nasal cavity and out through their anterior openings. The disease had not confined itself to the palate, but, extending to the nasal organs, had completely destroyed their internal structure, as well as a portion of the nasal bone, to such an extent as to materially change the external shape of that organ. The obturator, Fig. 4, constructed for this case, was of one piece, and made to cover the hard palate completely, extending from the central incisors to the posterior wall of the pharynx, and passing a short distance beyond the edges of the opening on each side. The plate was made to press firmly against that portion of the soft palate which remained, yet not so firm as to be the cause of irritation, the edges of the plate being slightly bent downward for the same reason; the object being to prevent the possibility of the soft parts being

Fig. 4.

drawn above the palate, which would afford a communication with the nares. The posterior edge of the obturator was bent downward at a right angle with the body of the plate, and curved so as to form with the posterior wall of the pharynx an oval opening sufficiently large to permit the patient to breathe freely through the nostrils. In the act of deglutition, the muscles would contract and press against this portion of the plate, thereby cutting off the communication with the nares. To this plate was attached three artificial teeth — two lateral incisors and one molar—the whole being retained in position by means of clasps around the teeth.

"This obturator the patient has been wearing a little over two months, and, like the former one, has proved successful, deglutition being restored, and the speech considerably improved."

Dr. T. L. Buckingham, Professor of Chemistry and Metallurgy in the Dental College, a gentleman quite celebrated among his friends for his mechanical ingenuity, presented the following cases :—

The first case he said "he had anything to do with was that of a gentleman who had an opening through the hard palate, in the center of the arch, about as large as a ten-cent piece. This gentleman had worn an obturator with a sponge attached to it, made in the following manner: a plate was struck up to fit the roof of the mouth, and a piece of sponge was sewed upon the palatine surface to fill the opening, and to hold the plate in its place. Some of the objections to this obturator were, that the opening became enlarged from the absorption occasioned by the pressure of the sponge upon the sides of the cavity; it would also become very offensive, and require frequent removal. In this case a plate was

struck up to fit the mouth, and attached to the teeth by means of clasps. This simple appliance answered better than any other that had been made for him.

"*Case* 2 was a gentlemen who had an opening into the left antrum, at the point where the second bicuspid and the first molar had been, but on the outer surface of the alveolar ridge, or rather where the ridge had been—for the alveolus was entirely absorbed opposite the opening, which was about half an inch in length by a quarter in width. The nasal bones were diseased, which caused an almost intolerable odor.

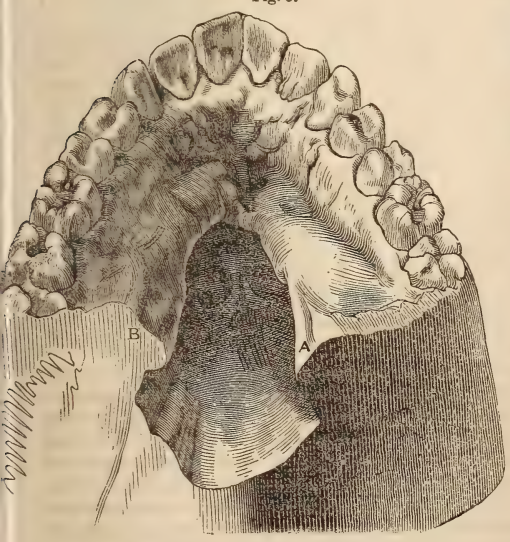
"He made, for this case, a small obturator to close the opening. This was left open at the top to allow him to place in it a small portion of chloride of lime. His intention was to correct, if possible, the offensive smell, but the patient did not live long enough to give it a fair trial; he remarked that while any of the chloride of lime remained in the obturator there was no unpleasant smell, but, unfortunately for the experiment, the gentleman had lost nearly all the sense of smell, and, therefore, could not tell when it had evaporated.

"He made for this case an upper set of teeth, to which the obturator was secured, it being held in position, to a great degree, by the plate and teeth.

"In the two preceding cases the voice was not altered when the appliances were in the mouth.

"*Case* 3 was a gentleman who, on a previous occasion, had a tumor removed which covered a portion of the posterior surface of the hard, and the anterior surface of the soft palate. The surgeon, on its removal, had divided the velum and uvula, so that the case resembled a congeni-

Fig. 5.

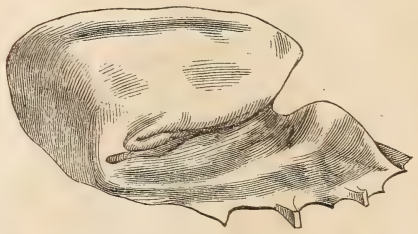


tal deformity. The attempt had been made twice to bring the soft parts together again by a surgical operation, which had failed.

"Fig. 5 shows the appearance of the parts very clearly—the letters A and B showing the thickened muscles as they hung down on the sides of the pharynx.

"He made for this case an obturator, Fig. 6,

Fig. 6.



the plate of which covered the whole of the roof of the mouth, with a bulb attached, to extend up into the posterior nares and well back toward the antero-posterior walls of the pharynx, leaving but a small space between them. This obturator enabled the patient to eat and drink without annoyance; without it, food would pass into the nares and occasion much inconvenience. It also greatly assisted his voice, as many of his words could not be understood when it was not worn, but he could articulate them with great distinctness when it was in place; remarked that he had been more successful in restoring the voice in this case than in any other he had treated, and attributed it to the fact that this person, having once had his voice perfect, was always endeavoring to speak as he had formerly done, while in the congenital cases they did not try to overcome this difficulty.

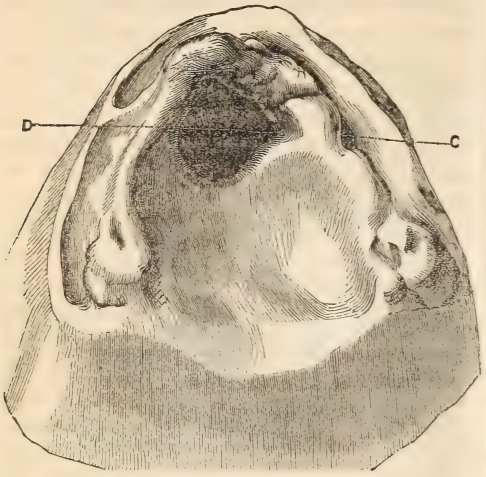
"*Case* 4 was that of a lady who had an opening in the anterior part of the hard palate, a little larger than a ten-cent piece, and also a small one exposing the left antrum. All the teeth in the superior arch had been removed, and absorption of the alveolar process, opposite the smaller opening, had progressed to such an extent as to present at that point a deep depression; the remaining part of the alveolar ridge had not been absorbed more than is usual where the teeth have been lost.

"Fig. 7 shows the appearance of the different parts, C representing the smaller opening, and D the larger one; between these two points was the depression referred to.

"This lady had never worn any mechanical appliance, but had been in the habit of closing the larger opening with loose cotton or pieces of linen. Without having it filled, she could scarcely be understood when speaking. He made for this case, first, a plain plate to extend over both the openings, but not into them; upon this plate, at the point where the process had been absorbed, he arranged wax so as to restore the alveolar ridge to its natural fullness. By using the plate with the wax attached for a mould, he was able to obtain metallic dies. A second plate was then made to fit over that part of the first one which was covered by the wax;

these two plates were then soldered together. The object in forming a double plate was to fill up that part where absorption had taken place,

Fig. 7.



so that the plate when worn would resemble the roof of the mouth, and not be deeper on one side than on the other.

"This obturator was very successful, the voice was much improved, and she could eat and drink as well as persons ordinarily can who wear upper sets of teeth; and, what was more remarkable, she could wear it without springs or any assistance whatever to retain it in position.

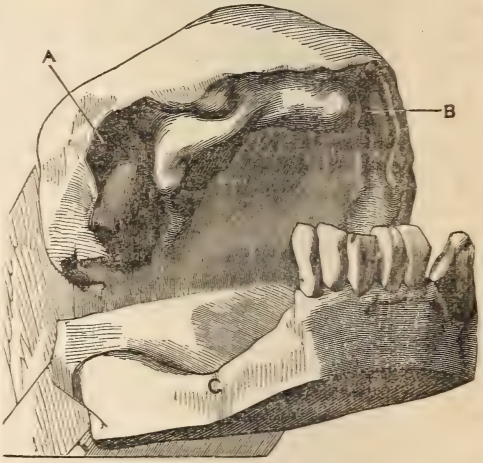
"*Case* 5. — He stated that he hardly knew whether this case should come under discussion at the present time or not, as it could hardly be termed a palatine fissure, but, from its exceeding interest, he would now present it.

"A gentleman was handling a gun loaded with buck-shot, when it was discharged in his hands. The gun being pointed toward his head at the time, the load struck him at the angle made by the ramus and the body of the inferior maxillary on the right side, passing upward and outward on the opposite side of the face. It must have been a terrible wound, and should, from the representation given, have caused almost instant death. He, however, recovered after being confined to his bed for more than a year, and during that time he had to be fed with a spoon. The only way he could eat or drink was to lie on his back and let the food run down his throat, and it was a long time before he found he could swallow.

"The teeth in the upper jaw were all gone excepting the left second molar and wisdom tooth; both antrums were fully exposed, the remaining roof of the mouth being left almost flat. The lower jaw-bone was gone on the right side from the second bicuspid back, and also the condyloid process; but about three-quarters of an inch of the coronoid remained, which was drawn in so as to partially cover the roof of the mouth. The molar teeth were lost on the left side, and also all on the right side from the symphysis. In taking hold of the lower jaw it could be moved either backward, forward, or laterally, to a considerable distance.

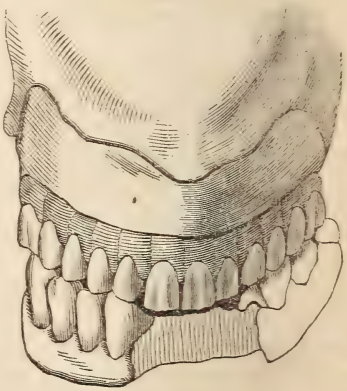
"Figs. 8 and 9 show this case—the letters A and B the openings into the antrum, and C the

Fig. 8.



end of the lower jaw-bone. The distance between the points A and C, when the mouth was closed, was just two inches.

Fig. 9.



"This gentleman had been wearing a partial set of upper teeth which had been attached to the molars, but the clasps of the artificial teeth had loosened them, and it was therefore necessary to replace this piece of work with a set that could be supported in some other way.

"This was the most difficult case he had ever treated. One of the greatest obstacles he encountered was the obtaining of a correct impression. To accomplish this, he first filled the antra with loose cotton to prevent the wax from pass-

ing into them; he then took as good a wax impression as he could of both the upper and lower jaws; from these he made impression cups to be used in taking the plaster impressions. There was very little difficulty in obtaining an impression of the upper jaw with plaster, (the antra being filled with cotton as before,) but it was far more difficult to take a good one of the lower jaw. The distance from the points of the teeth down to the point marked C, as shown in Fig. 8, was so great that when any material was pressed down to take the impression, it was almost impossible to remove it from the mouth without altering it so much as to render it of no value; after several trials he succeeded in getting a very good one with plaster. It had to be broken before its removal from the mouth, but by carefully putting the pieces together, a good plaster cast was obtained.

"He then made a plate to extend over the roof of the mouth and cover both of the cavities opening into the antra; on this plate he arranged wax, bringing it down as far as the alveolar ridge should have been; then made a metal cast and struck another plate to fit over the first, soldered them together, and placed upon these single gum teeth as he would have done had there been no more absorption than is usually found in upper cases.

"There was nothing peculiar in the formation of the lower case, except that the teeth had to be very long on the right side, (for this a block was made,) and the plate was not allowed to extend farther back than to the position once occupied by the second bicuspid tooth. The under teeth were put in more for the purpose of attaching springs for the support of the upper ones than for use.

"He could not say what success had attended this case, as the gentleman left the city immediately upon their insertion, and he had not seen him since that time."

Other cases of equal interest are found in the report, but as they are unaccompanied by models I omit them.

A material for obturators is fast winning its way to professional favor in the article known as Vulcanite. This is the base now so extensively used in the manufacture of sets of teeth. Its merits and demerits are widely discussed in all the dental publications of the day, and from these journals everything pertaining to it may be gleaned. The advantages claimed for it are: its cheapness, its lightness, its capability of being moulded into the most irregular positions, and its similation in color and feel to the natural parts. The objections are its liability to decompose and become offensive. The manipulation of the material is so easy that the surgeon attempting the manufacture from it of surgical appliances, would give himself a source of recreation rather than work. To make an obturator from vulcanite you take an impression of the mouth in wax and make from it a plaster model precisely as before described. Prepared gutta-percha is now moulded over this model to the form required. Plaster is next run over this first model, the gutta-percha plate being between. The model and counter-model thus made are separated and the place of the original plate supplied with fresh vulcanite. The models are now put together and the vulcanite between subjected to pressure. The whole is then placed in an apparatus termed the vulcanizer, and this being filled with water the temperature is raised to some 325 degrees. When taken from the steam bath the plate is found to be as hard as bone. The last process consists in the polishing of the piece; this is a simple manipulation, and requires only one or two files, a burnisher, and some patience.

M. Desirabode, a French surgeon, proposes a palatine obturator for congenital fissure of the palate, (see Harris's Dictionary,) by which he thinks the sides of the alveolar border may be so approximated as to favor a union of the divided parts. It consists of a platina plate fitted to the vault of the palate and fastened to the teeth by means of three clasps soldered to each side, so as to cap the canine teeth, the bicuspid, and two of the molar teeth, bent upon the alveolar border in such a manner as to maintain the whole pressure. After the plate with these appendages has been well adapted, it is to be divided from before backward along the median line, and then a piece removed from either side so that the two edges may be separated about half an inch from each other. The two plates are now united by means of a thick and resisting band of caoutchouc, made fast by riveting. The plates thus united form a smaller obturator than the plate before it was divided, so that it can only be applied by putting the caoutchouc on the stretch, which is effected by means of two sticks so contrived as to force the two plates asunder. After the plate is properly adjusted these are removed, when, by the contraction of the caoutchouc, the sides of the alveolar borders are gradually approximated.

This contrivance of Desirabode looks very plausible, but, unfortunately, all experience is against its employment.

In the first place, to correct by pressure a fissure in the hard palate, implies the very earliest use of such force. A child is some five or six years old before its first dentition is properly

completed; and even at this period one would not dare to apply any such apparatus, because of the physiological process of absorption which has already commenced in certain of the teeth. Then if, on the contrary, he meant his instrument to apply to a more advanced period, he would have to wait until at least the sixteenth year, as before this age the fangs of the molars are not perfected. The bones by this time have, as a matter of course, become much less amenable to treatment. And, again, even besides this, as I know from practical teachings, his apparatus would in less than a week's time produce such periosteal trouble about the alveoli that no human being would or could bear the continuance of the pressure; or, even admitting there should be found a patient heroic enough to bear the treatment, the apparatus would have its usefulness destroyed in less than two weeks by the teeth to which it was attached coming away. In other words, the instrument is useless because the teeth, being the weaker and more yielding, would give way first.

In Liston and Mütter's Surgery is the engraving of an obturator made to supply the loss of both hard and soft palates. The contrivance, which is a simple plate such as I have described, is seen to extend from the teeth back to the fauces. Attached to the back portion of the plate representing the soft palate, is a metal pendulum working on a hinge—this pendulum is much better omitted, for while it cannot possibly answer any useful purpose it must certainly be much in the way. In making so extensive an obturator, it must not be forgotten that the part which represents the soft palate is to be given the double curve which is seen on looking into any healthy mouth. To get the impression for such an obturator we have only to employ a deeper impression cup.

To be continued.

New Treatment of Prolapsus Ani.—M. Foucher recommends the subcutaneous injection of strychnia in the treatment of the prolapsus ani of infants. Ten drops of a watery solution of strychnia (gr. iij to 3xj) are to be injected with Wood's syringe into the sphincter ani, and repeated after twenty-four hours. M. Foucher records the case of a girl, aged four years, in whom this treatment proved entirely successful. Great improvement followed the first injection. The quantity of strychnia injected on each occasion was about one-twentieth of a grain.—*Gaz. Méd. de Paris*, Feb. 9, 1861.

Medical Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Reported by William B. Atkinson, M.D., Recording Secretary.

November 13th, 1861.

VARIOLA, ITS MODIFICATIONS AND TREATMENT.

Dr. Bell.—This subject was selected for me by the committee, to make some remarks on this evening. In restricting myself within these limits it will not be necessary for me to speak of the origin, symptoms in detail, and morbid anatomy of variola.

1. The most remarkable, the least to be anticipated, and the last observed modification is that produced by the passage of the variolous poison through the organism of the cow, and its resulting in true vaccinia.—*Ceely, Bosquet, etc.*

2. The chief and most noteworthy modification of variola in the human subject, is that caused by the occurrence of previous vaccine disease, constituting varioloid.

There are two varieties of this varioloid modification—that produced in the natural way by exposure of the vaccinated person to the emanations from a variolous subject, and that caused by inoculation of a vaccinated person with variolous matter. The first variety is that of most ordinary occurrence.

The mitigation of variola by the inoculation of an unprotected subject with variolous matter hardly constitutes a modification. The eruption and fever are less in the inoculated than in the natural small-pox, but they are of the same character in both.

Epidemic and sporadic small-pox do not constitute modifications.

Akin to modifications are varieties. The two chief of these latter in small-pox are the *discrete* or *distinct*, and the *confluent*. To these are added the corymbose, the erysipelatous, the roseate, the tuberculated, and the petechial, as regards the cutaneous eruption.

Every variety is divisible into three stages, viz., incubation, maturation, and decline.

The two most noticeable varieties of variola, especially in reference to prognosis, are the distinct and the confluent. The first is usually quite manageable; the second, under any and every kind of treatment, is, in a large majority of cases, fatal. The liability to the one or the other of these varieties does not seem to depend on age, constitution, or previous habits.

There are modifications in the symptoms and in the intensity of the disease by the extent of the eruption in the posterior fauces and in the larynx and trachea down to the ramifications of the bronchia. In this highly morbid condition of the air-passages we meet with hoarseness, difficult breathing, cough, and sometimes asphyxia. To these are added tonsillitis and swelling of the soft palate, and consequent difficulty of swallow-

ing. Œdema of the glottis and larynx increases the complications at this time, and is, of itself, a cause of death. All these symptoms are most common in confluent small-pox.

As pustulation advances on to maturation, the fever is greatly moderated; but with beginning desiccation comes, often, secondary fever, during which the patient may sink beyond recovery. At this time, and even as convalescence approaches, patients are often tormented with phlegmonous, erysipelatous inflammation, abscesses, and imposthumes, and, sometimes, gangrenous destruction of parts of the skin. These incidents of small-pox are of much more frequent occurrence in males than in females, and, very generally, they are only seen in those who recover.

Cerebral and nervous symptoms marked by acute delirium, with great agitation, are seen both in variola and in varioloid, although they subside sooner in the latter than in the former. They are of bad augury in variola, and every now and then assume the features of *delirium tremens*, especially in those whose constitutions have suffered from previous excesses. Sometimes low delirium, with collapse of features, tremors, cold extremities, and *subsultus tendinum*, are the precursors of death.

The blood is supposed to be more particularly implicated in the petechial variety of variola. This is more common in males than in females. To it belongs the so-called black small-pox, (*variolæ nigræ*,) the eruption in which is imperfect, and fails to reach complete maturation. Cases of this variety are of short duration, and almost invariably fatal.

Among the epiphenomena of small-pox are pleurisy, pneumonia, and bronchitis, one or other of which is most apt to appear at the decline of the original disease.

Ophthalmia is described as a sequela of small-pox. I have seen little of it, either in the great epidemic of 1823–4, or in that of the last year.

Treatment.—Comparing my former with recent experience, I have little to add to inspire confidence in any therapeutical course or particular remedy. In mild cases, or those of the distinct variety, the cooling regimen—fresh air, cool and cold drinks, according to the taste or craving of the patient, will suffice; aided, sometimes, by a mild aperient. In the irritative or preliminary fever, the treatment will be the same as in that of other cases of fever. In hospital practice the physician seldom has an opportunity of seeing his patient until this stage—lasting from two to three days—has been gone through, and the eruptive one has commenced. The diagnosis once established, and it cannot be with any confidence until the eruption begins to rise into vesicles, the question comes up, Is abortion or jugulation of small-pox possible? Some have answered in the affirmative, but without adequate proof to sustain the assertion. Attempts for this end have been made by large blood-letting and purging, and by cauterizing the rising eruption, so as to prevent its reaching the stage of pustule. Benefit has been claimed for these alleged preventive measures, viz., that, if they are not entitled to be thus called, they at least serve to mitigate the violence of the disease. There are, occasionally, patients of a full plethoric habit, and good constitution, who may be benefited by this antiphlogistic treatment; but, as a general thing, it is not called for. On the contrary, we may feel ourselves obliged, from the very onset, to administer stimulants to subjects of an anæmic nature, and whose system has been depressed by want and atmospheric exposures.

If the eruptive fever is high, we give saline purgatives or castor oil. This last is the article which will be found best adapted to the larger number of those laboring under variolous disease. In these cases I prefer spiritus mindereri, with the addition of sweet spirits of niter, and, sometimes, antimonial wine, sometimes ipecacuanha wine, as a febrifuge; allowing, at the same time, the patient the free use of a solution of cream of tartar sweetened, as a drink. Wakefulness and unrest are met by Dover's powder, in the ordinary ten-grain dose. Delirium will require its repetition at intervals, or a solution of acetate, or sulphate of morphia, in doses of one-eighth of a grain, repeated according to circumstances.

In confluent cases, early recourse will be had to a cordial and sustaining treatment, by the use of ale or porter, and of wine or brandy, in gruel, farina, etc., wine-whey, milk-punch, and nourishing broths. One or more of these, as may be selected, should be regularly given at the prescribed intervals, by night as well as by day. In variolous, as in other fevers, many a patient has sunk beyond recovery during the night, especially between midnight and morning, for want of the administration of diffusible and nutritive stimulants in alternation. Oil of turpentine, with camphor mixture, and some quinine, would seem to have been of service in the stage of secondary fever, with much prostration and delirium, simulating, in fact, typhoid fever. In such cases the tongue is dry, brown, and partially chapped; the throat greatly obstructed by thick, tenacious mucus, and the secretion from the variolous pustules lining it.

In laryngeal and bronchial complication, with febrile excitement, calomel and Dover's powder, in divided doses, a grain or half a grain of the former and three of the latter, combined with chalk, have sometimes been serviceable. For the most part, except occasionally, under particular circumstances, as an aperient, calomel is not called for in small-pox. In my first hospital practice, at the date previously noted, salivation was tried in a few cases, but with a very unsatisfactory result. More recently, chlorate of potash has been given, but, as far as I could see, without any benefit.

The local treatment will consist of substances used for gargles, and as caustics for the throat, and those applied to the skin. One of the symptoms aiding us to form a diagnosis, in small-pox, is sore throat, with painful and difficult deglutition.

In hospital practice it is desirable to get a gargle which is easily made, and can be freely used by the patient, in addition to its peculiar properties as a detergent and stimulating wash to the part. I have found nothing to meet these indications so well as a solution of common salt, one tablespoonful to half a pint of water, to which is to be added two tablespoonfuls of vinegar.

As relates to the external treatment, recourse has been had to baths of different temperatures, and vapor. Years ago I used cold affusion and sponging without success. The requisite means and nurses' help have been wanting to enable me to speak of the effects of warm and vapor baths. *A priori*, knowing how entirely, in many cases of confluent small-pox, the functions of the skin are obstructed, soothing, if not still more decidedly beneficial effects might be expected from this variety of bathing, by its opening some of the obstructed exhalents or secreting orifices of the skin.

Of the effects of silk masks, gold-leaf spread on the face, unguents simple and mercurial, and cauterization with nitrate of silver, I can say but little. In some cases the early and continued use of Lugol's compound solution of iodine, of the "stimulant" strength, has done some good in impeding the formation of pustules, and so far lessening subsequent pitting. If the results of these trials of various substances to the face to prevent pitting and scars were faithfully given we should have a singular diminution of the number of cases in which it is said to have been successful.

Dr. Coates observed that the subject of vaccination had now been so much studied, that there had arisen a great tendency to unanimity about it in the medical world. He did not profess any particular advantage in the investigation. He has himself been led to incline very much to the idea that vaccination is not so exact a business as seems to have been for many years the general impression.

In the earlier debates on this subject, when cases of small-pox were reported as occurring after vaccination, it was contended by all that the operation had not been properly performed. For example, in the directions published by the British and Foreigh Vaccine Institution, it was insisted upon as necessary, that the insertion be made with the lymph, and this taken on the seventh or eighth day. In the United States it has almost always, throughout the whole nation, been done with the scab. Thus, in many instances, seventeen or eighteen days had elapsed, yet we fail no more in preventing or modifying small-pox than occurs in England.

Vaccination varies much in individuals, and with different specimens of matter. Some have a small areola and scab, while others are much larger in every way. He did not believe the star-shaped form of areola was of as much importance as had been ascribed to it. He had revaccinated several cases on account of the areola being angular, but they did not take.

He had seen all the forms of the disease enumerated by the lecturer, except the corymbose, and supposed that this was of rare occurrence. But the extension of abstract medical science was a less urgent duty with the members of the society than the cure and prevention of disease. On this, the practical point, he would quote Stromeyer's recent publication. This eminent surgeon assumed a period in the hospital at Munich, embracing 10,000 cases, nearly all soldiers. Every Hanoverian soldier is vaccinated when he enters the army, and the operation is repeated upon him every five years. During the interval above described, the disease prevailed considerably in the City of Hanover; yet out of the 10,000, only four had anything at all resembling small-pox, and these were cases of the *windpocken* of Van Swietan—an eruption of a limited number of dry, horny, lenticular vesicles, accompanied with scarcely any indisposition. Of those revaccinated at this short interval, about thirty per cent. had more or less of the ordinary vaccine affection. From this important series of observations, Dr. Coates thought it might be fairly inferred that the periods of a whole lifetime, of seven years, of twelve years, etc., for which the protection afforded by vaccination was supposed to endure, were certainly not without numerous exceptions, and perhaps absolutely indefinite and uncertain. As vaccination is our *only* protection, he thought the Hanoverian treatment preferable to any one predicated upon supposed fixed periods, in which the benefit was believed to expire.

There seemed to him a very serious contradiction between the old alleged experience of so many years, ever since the time of Sydenham, that the cooling treatment was the most successful, and the recommendation to give warm punch, etc. He did not believe that success depended on extremes or on exclusives, but believed that the best results would be met with from moderation in the use of medical agents, and such a regimen as comported best with the comfort of the patient.

He had seen a case of a black man with confluent small-pox bled in the hospital; the oozing went on for twenty-four hours, and he died, though probably he did not lose more than an ounce and a half after the bleeding, which was to ten ounces.

He doubted saving any great number of lives by any treatment. He thought the muriate of ammonia valuable as a cooling remedy, and would put in a caveat to some, not to imagine it to resemble the acetate, which was in fact active as a stimulant. He was inclined to use veratrum viridi, but had never tried it in the disease.

The application of collodion, with the idea of preventing pitting, a practice evidently taken from the newspapers, had been obtruded on a patient of his by an interfering practitioner. The result was a bright erysipelas in each cheek, with great pain, and an increase of fever. This absurd application is a violent stimulant, and adheres with extreme rigidity, producing all the bad

effects of a forcible compression of an inflamed part.

It had occurred to him, as an objection to a small-pox hospital, that mild and bad cases should be placed together. A variety of chambers should be provided; bad cases should be isolated, and artificial ventilation used to prevent spreading.

He related an instance where the disease broke out in a boarding-school, and was confined by isolation, with entire success, though many persons were in the house.

To be continued.

EDITORIAL DEPARTMENT.

REVIEWS AND BOOK NOTICES.

A System of Surgery; Pathological, Diagnostic, Therapeutic and Operative. By Samuel D. Gross, M.D., Professor of Surgery in the Jefferson Medical College of Philadelphia; Surgeon to the Philadelphia Hospital; Member of the Imperial Royal Medical Society of Vienna, etc. etc. Illustrated by Twelve Hundred and Twenty-seven Engravings. Second edition, much enlarged and carefully revised. In two volumes. Philadelphia: Blanchard & Lea, 1862. Price $12.

The rapid sale and early exhaustion of a heavy edition of this great work on surgery, and the speedy appearance of an enlarged and improved second edition are causes for congratulation among all who feel a pride in the advancement of American medical literature. The work has been received throughout the land as the masterwork of a leading surgeon, and as a crowning effort of one whose name has for a long time stood the most prominent in our surgical literature. The appreciation of the work abroad has been a universal commendation, and its translation into one European language has already advanced.

It is, beyond comparison, the most comprehensive work on surgery in any language, and as an exponent of the claims of American surgery, so much ignored in the foreign reprints, our national pride should interest us in its patronage.

The matter added to the new edition is an amount equivalent to some hundreds of pages, yet the bulk of the volumes is actually less than that of the first edition by one hundred and sixty-four pages. This reduction has been accomplished by condensation of language, and, most particularly, by a reduction of the size of the type used. Nearly three hundred illustrations have been added.

Among the most noticeable and important additions will be found those on the subject of gunshot wounds, a topic of great surgical interest at the present eventful period.

The complete manner in which the author has kept his book up with the current of improvements which have been developing in the short period elapsed since the first edition appeared, will be noticed by those who are familiar with journal literature.

The confident and positive manner in which the learned author gives the verdict of his own dictum to settle points about which surgeons throughout the world are cavilling, is a characteristic feature of the work. Thus, he firmly asserts the *unity* of chancrous virus, and as bluntly denies the communicability of secondary syphilis, while such opinions are in opposition to those of observers in this country and in Europe whose facilities for the practical study of syphilis are the greatest.

The great amount of valuable matter added in this edition evinces the erudition and industry of the author, and makes the work entitled to his claim of having embraced "the whole domain of surgery."

With our appreciation of the work as the greatest individual achievement with which American medical literature has yet been honored, and being aware how extensively it is known and valued, we have thought it unnecessary to do much more than announce the appearance of a second edition.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, MARCH 15, 1862.

☞ Correspondents and friends will please bear in mind the change in location of the office of the Reporter.

HAVE WE TOO MANY DOCTORS?

Theologians are discussing the question whether "we have too many ministers?" Each participant in the discussion decides in the affirmative or negative as each looks at the matter from a different stand-point, and hence unanimity of opinion will not be likely to result. If the pecuniary interests of those who are in that sacred calling be the point from whence the observation is taken, there are too many; but if the spiritual wants of the world is the consideration, there are too few. So that the object seen, varies materially with the medium through which it is viewed, and with equally valid premises one may decide affirmatively and another negatively, and both, perhaps, be entirely correct.

Just so, in discussing the question whether we have too many doctors, we may answer it *yea* and *nay*, and make each affirmation or negation appear plausibly true.

Viewing the profession of medicine as a means by which a certain number of men are not only to gain a livelihood, but amass wealth and secure a competence for the "sere and yellow leaf" of age, doctors are too numerous; for not half of the whole aggregate number ever reach that happy goal of sensual ambition, a competence—not to say wealth. Now and then we find a physician who is reputed wealthy, who rides in his own carriage and wears his own livery; but they are,

"Like angels' visits,
Few and far between;"

and their rarity makes them the observed of all observers. And even here, if we trace the history of these exceptional cases, it may be their wealth is inherited, not earned, has descended to them as an heir-loom, and is not the product of their laborious painstaking. Still the mass of physicians are proverbially poor. The fruits of their toil are in the hands of the thousands over whom many wearisome hours have been spent in watching the struggle between life and death. The wealth to which they alone can lay claim is upon the debtor side of the ledger against those who are willing to owe, but never ready to pay. Viewed in this light, therefore, we have too many doctors. A lessening of the aggregate would increase the pecuniary compensation of the remainder. The larger the reduction, the brighter the prospects of those who should be left, not to say the better for humanity and the world.

But this is a merely mercenary view, and yet one which, no doubt, many take who enter upon the study of the healing art. Visions of gold, of opulence, allure and attract them, which, alas! are seldom realized.

Let us take our stand-point on a higher range. The profession of medicine is philanthropic, benevolent. It is the almoner of the public health; it is the guardian of life. It is the good Samaritan which binds up the wound, pouring in the oil of joy and consolation. Regardless of their own safety or weal, its votaries seek out the distressed and the downcast, soothe their pains and mitigate their woes. It is the healing art. Its studies, its investigations, its discussions all tend to one result—to promote the temporal well-being of all, to shield from the attacks of disease or to eradicate it from the system, to ward off the approach of death or despoil the monster of his prey.

Viewed in this light, the time will never come when we shall have too many doctors; for till time shall be no more there will be woes to assuage, tears to wipe away, distresses to relieve, diseases to cure, aches and pains to ease, objects of pity to soothe, lives and health to be guarded and watched, and he who has a heart that throbs with sympathy for his fellow will always find objects enough on which to spend his utmost commiseration. And if the number of doctors were multiplied by thousands, each would find some kind word to utter or some pressing grief to pity.

Viewed, again, as a medium through which the goal of fame, of honor, and distinction among men are to be gained, or a name transmitted to posterity as an ornament or benefactor of the race, or the ends of lofty ambition to be answered, the profession is already overcrowded. Few men in the profession carve their names high on the roll of fame, and in the scramble for distinction thousands are trampled down to rise no more. The names of a few like Hippocrates, Galen, Celsus, Cullen, have come down to us from the long ages of the past, while the mass have passed away unheralded and unknown. "The dead forgotten lie." Few in our day will survive their own demise. The roll of fame is quickly read. Here and there one succeeds in compelling the admiration and applause of the public, but the toilsome, laborious, tangled way through which he travels to accomplish his purpose, is too tedious and rugged for the mass. The smoother path is more frequently traveled, and most are content, when the first fresh, warm outburst of ambition is met with the cold, chilling blast of neglect, to give up the chase and plod along the more beaten track.

Viewed, yet again, as a science, not yet fully developed, the border lines only of which have been reached, and in which vast progress is yet to be made, we have not too many doctors. The field is broad and expansive. As new avenues are entered, new light will dawn. As new discoveries are made, broader fields, yet unexplored, will present themselves to view; and without jostling aside their neighbor to open a pathway for themselves, each may find enough in anatomy, in physiology, in therapeutics, in pathology, in all the relations of these to each other, to health and to disease, to life and to death, to employ their utmost exertions, and to reward their utmost labors. Were doctors as the sands of the sea-shore for number, medicine as a science would task and

compensate all their toil, and the more rapid and certain the progress they made, in investigation and in results, the more assuredly would humanity rise up and call them blessed, the more certainly would the profession be a blessing to him that gives and to him that receives.

The question then returns to us, Have we too many doctors? We answer, NO! With men of thorough preliminary study in all the branches of education, of high intellectual attainments; with men thoroughly educated, by a long and systematic process of training, in all the branches of medical science; with men fully qualified to develop the results of their education in practical life; with men of moral worth as well as intellectual attainments, the medical profession is not overstocked. There is ample room for many more than have hitherto sought its honors. In this view we may answer our question emphatically in the negative.

Still the inquiry returns, Have we too many doctors? We answer, *Yes!* Far too many. Too many whose professional attainments will never reach the heights of mediocrity; too many whose brawl and swagger and gross immorality disgrace the noble profession; too many who differ from the most arrant quacks only in having permission to write "M.D." at the end of their name. The rejection of two-thirds of all the candidates who present themselves for examination before the examining boards of all our colleges would be a sanitary measure of decided and permanent benefit, not only to the profession at large, but to the interests of the whole people, and secure a succession of thoroughly educated physicians.

COMMENCEMENT OF JEFFERSON MEDICAL COLLEGE.

The annual commencement of this institution took place on Saturday last, at the Musical Fund Hall. The Hall was filled to its utmost capacity, a large proportion of the audience being ladies. Precisely at twelve o'clock the Faculty, headed by the President of the College, Hon. Edward King, LL.D., and Prof. Robley Dunglison, M.D., entered the Hall, and, together with invited guests, took seats upon the platform. The graduates followed, each designated by a white rosette, and took their appointed seats. Prayer was offered by Rev. John Chambers.

The degree of Doctor of Medicine was then conferred upon the following gentlemen by the President of the College, they severally advancing to the platform as their names were announced by Prof. Dunglison, viz.:—

Andrews, J. Charles, Pa.; Angle, John S., Pa.; Applegate, Jos. S., Ind.; Baldwin, Louis K., Del.; Barnes, Ira Norton, N. H.; Barton, J. Hervey, Pa.; Bates, J. Wm. P., Md.; Beane, Wm. H., Pa.; Berg, J. Fred., Jr., Pa.; Blaydes, James E., Tenn.; Bower, Henry J., Pa.; Brooks, Edward, N. Y.; Burg, S. Wesley, Pa.; Burnett, Joshua U., N. B.; Cantrell, Wm. A., Pa.; Carroll, Thomas, Pa.; Conklin, Gustavus, Pa.; Cook, Wm. Harvey, Pa.; Duffell, Charles L., N. J.; Edward, James L., Ill.; Fitch, Pelatiah, N. J.; Gast, John Reynolds, Pa.; Girvin, Robert M., Pa.; Graham, Samuel, Pa.; Grant, John. N. S.; Hayes, Joseph H., Pa.; Healy, James, Ky.; Hidden, Wm. Buffet, N. H.; Hoffman, Chris. N., Pa.; Keen, Wm. W., Jr., Pa.; King, Cyrus B., Pa.; Knipe, Jacob O., Pa.; Lane, Edward G., D. C.; Lewis, Edw. C., Ohio; Litz, Jefferson, Pa.; Marchand, Jas. I., Pa.; Marchand, Wm. K., Pa.; Martin, Jos. R., Pa.; Maury, Frank F., Ky.; McClung, Leigh, Ohio; McCormick, S. C., Pa.; McGuigan, Jas. A., Pa.; McHenry, Thos., Pa.; Miller, Jacob M., Pa.; Mitchell, H. H., Mass.; Montmollin, Jas. M., Ky.; Mosser, M. Bren., Pa.; Myers, Isaac N., Ind.; Neblett, Hy. M., Va.; Norris, John Clem., Md.; Okie, Wm. T., Pa.; Owens, John E., Md.; Patterson, Jas. B., Ill.; Perry, M. S., Mass.; Porter, George L., Pa.; Purcell, Wallace M., Ind.; Raker, Henry M., Pa.; Reed, J. Farley, Pa.; Reeves, W. H., M.D., Ohio; Reinholdt, John B., Pa.; Robins, Lorenzo D., Pa.; Rogers, Ebenezer, Pa.; Rumbold, F. Frazier, Wis.; Scip, George W., Pa.; Shearer, James, Pa.; Smurr, Thomas A., Ohio; Snyder, Peter C., Pa.; Steckel, Edmund F., Pa.; Sternberg, A. J., N. Y.; Stewart, Jeremiah S., Pa.; Strawn, B. F., Mo.; Stode, John T., Ky.; Stubbs. Joseph H., Pa.; Taylor, Brent W., Ky.; Thompson, E., N. F.; Thompson, Michael, Pa.; Treadwell, P., N. H.

Of the above, there are from—Pennsylvania, 42; Kentucky, 5; Ohio, 4; Indiana, 3; New Hampshire, 3; Maryland, 3; Massachusetts, 2; New York, 2; New Jersey, 2; Illinois, 2; Tennessee, 1; Missouri, 1; Delaware, 1; Virginia, 1; Wisconsin, 1; District of Columbia, 1; New Brunswick, 1; Nova Scotia, 1; Newfoundland, 1. Total, 77.

This ceremony being concluded, Prof. Dunglison congratulated the graduates on the distinction they had attained, and wished each of them a long career of happiness and prosperity; and then proceeded to distribute to the favored ones the large number of mementoes of affectionate regard from the fair sex, in the shape of choice bouquets, which covered a good-sized table upon the platform.

Prof. Samuel H. Dickson then delivered the valedictory address, in which he congratulated the graduates on being inducted into full fraternity with the members of the profession everywhere; and on having conferred on them the rights and privileges of the physician. A necessity arising out of the original frailty of nature itself, had from time immemorial set apart a body of men, to whom are committed the sacred trust of the physical health of their fellow-beings. Into that body they had been admitted by the deliberate act of the proper authorities constituted by law; and in their special sphere would be endowed with a more despotic power than any other known among men.

The duties and obligations incurred by the physician are those which are binding upon him individually; those which he owes to his patients; those which connect him with his fellows and

associates, and those which spring from his relations to the community in general. While upon this subject, he said:

"If there are any of you whom circumstances have situated unfavorably for your future struggles with the world, I would press it upon you as one of your most immediate personal duties to enter on such a plan of study as shall place you in an easier and more becoming position, and remove a difficulty which will always weigh heavily in your competition with professional rivals better prepared. As members of one of the learned professions—so called—thus much will always be expected of you. Your associates will, of course, be men of letters and scholars; to maintain among whom a fair and eligible standing, you must needs become familiar with the current literature of the day. The taste for general reading thus aroused will grow upon you; and the better order of reviews will direct you in the selection of proper books, and enable you to employ such time as you are able to devote in this way, most usefully and effectually. * * *

"Beyond the indispensable technical attainments in anatomy, physiology, and pathology, the physician will feel himself greatly at a loss, if unprovided with a wide extent of collateral scientific acquirements. He must prepare himself to meet the sudden and appalling exigencies of poisoning by design and accident; and qualify himself for those inquisitions which illustrate and adorn the jurisprudence of the present time, making human life so much more secure than formerly by the detection of the most hidden secrets of the murderer, thus rendering impossible all escape from justice; as well as by the prompt and exact suggestion of the proper antidotes to deleterious agents. For his uses, too, herbs, roots, and flowers must be made to yield up their most recondite principle, their most delicate aroma; airs, earths, and waters must be analyzed, the pure set apart from the impure, and the most dangerous impregnations sometimes converted into available medicaments. From the depths of the dark mine, from the unvisited recesses of old ocean itself, he calls up the metal and the weed, the living secretion and the dissolved salt to add to his resources.

* * * * * * * *

"Keep yourselves informed of the progress going on around you, by the regular perusal of some of the numerous journals. Support by subscription one or more of those most convenient to you, and contribute for publication whatever may occur to you of special interest. Select and receive from abroad or from a distance some one which shall afford you a wider scope of information from a different point of view. With a large mass of trivial and useless matter, these gazettes contain a great deal that it is important to you to know. The former portion soon dies and is forgotten; what is worth preserving will remain.

"Exercise all the influence which you may acquire, in behalf of the universal education of the people; foster all institutions of learning, from the primary school to the university; aid in the collection of libraries and museums in every town and village. You are enlisted as the sworn enemies of imposture and delusion; these have no ally but ignorance, they decay and die wherever true knowledge is diffused."

During the address, the speaker alluded to certain improprieties and inconsistencies in the habits and mode of living of our countrymen. Our chivalrous devotion to women, our tender care of their comfort and well-being were characterized as noble traits in the American character; but to carry out this proud homage, the professor remarked,

"We must not give them just cause of offense by any indifference to the requirments of personal neatness. We must not intrude into their gentle presence reeking with the fumes of tobacco, or redolent with the products of the still; especially should the physician abstain from thus annoying them when prostrated by languor and morbidly susceptible. We must not, in their visits to our halls and theaters, subject them to soil and pollution of the flowing dress, and even render insecure the slippery footstep by a repulsive self-indulgence, exclusive and characteristic in its often-denounced prevalence among us. Be it our pride and distinction to set an example worthy of universal imitation, and sedulously to abstain from every violation of decorum or neglect of considerate regard for those about us, whether at home or in the sick chamber, in public conveyances, or places of amusement and resort. Everywhere let our dress and address, conversation and conduct, be such as would not be looked on as derogatory or unbecoming in the gentleman of the most refined and polished nationality."

The charge was concluded as follows:—

"At this moment of parting, let me once more remind you of the weighty interests entrusted to your keeping. You are charged not only with your own future destinies, but, in a certain sense, with the honor of our profession, which must not be tarnished in your hands; and with the reputation of your Alma Mater, which, we trust, you will always cherish with zealous devotion. To you she looks for common glory and renown; upon you she leans for future support and aggrandizement. Your successes will be trophies to her praise; your advancement will constitute her triumph. Her earnest eye will be fixed ever on your course; her maternal heart will throb with anxiety in all your trials; and her prayers ever ascend for your unceasing progress in knowledge and in virtue."

The address was delivered in an eloquent manner, and was well received.

The whole number on the sick list of the army of the Potomac is about 1500.

EDITORIAL NOTES AND COMMENTS.

Kensington Water Works.—The bad quality of the water furnished to the people of the north-eastern wards of the city is officially recognized by the chief engineer of the Water Department, and the remedy proposed is to discharge the water from the Delaware reservoirs, and supply that portion of the city at once with water from the Schuylkill. This is the proper course, and should be adopted without delay; and when this is once done, the entire Delaware works should be abolished as an intolerable nuisance. Their location is bad, just at a point in the river where, by the formation of eddies, the filth swept into it from the city drainage must necessarily accumulate, because there is no current to carry it away; and it is drawn up, foul from scum and sediment and putrefying matter, through the leaky plank raceways to the reservoirs, to be distributed to the people. No wonder an epidemic is the result. Greater is the marvel that so few have perished from its use.

The Death of Governor Pennington.—A correspondent informs us that the quantity of morphia taken by Governor Pennington was *two* grains, and not *eight*, as stated in our issue of March 1st, and that the drug was given in two portions of one grain each, at an interval of an hour. His death took place about seventeen hours after the first dose, whether from the morphia or disease is not certain, as a mortal issue was anticipated by both physicians before the drug was taken.

We make the correction with pleasure.

New York University, Medical Department.—The annual commencement in this college occurred last week at the Chapel building. Chancellor Isaac Ferris delivered the opening prayer, and conferred degrees upon the following gentlemen, sixty-five in number:—

Rollin T. Baker, New York; Edward Bennett, New York; Frederick Benoit, Canada East; John L. Braman, New Jersey; Henry M. Brush, New York; Richard C. Carlisle, South Carolina; Dwight S. Chamberlin, New York; Wm. H. Chamberlin, New York; Wm. C. Clark, West Indies; Mahlon J. Davis, Pennsylvania; Edmund De Witt, New Jersey; James W. Dickie, Canada West; Hugh Doherty, New York; George W. Edwards, New York; Wm. H. Ensign, Connecticut; John T. Farrell, Canada West; John N. Freeman, Illinois; Albert H. Gallatin, New York; W. J. Gilbert, North Carolina; George William Hatch, Maine; Samuel E. Holtzman, Indiana; Abel Huntington, New York; A. G. Kimberly, New York; John C. Lamont, New York; Alfred S. Laubach, Pennsylvania; John V. Lauderdale, New York; Samuel Lewen, New Brunswick; Mathias L. Lord, New York; John N. Lowe, New Jersey; Samuel Lynch, New Hampshire; Beverly N. McCleery, New Brunswick; Geo. E. McDonald, New York; W. H. Mather, Connecticut; Aaron J. Miller, Pennsylvania; James H. Mills, New York; George B. Munger, New York; Alden E. Nelson, Vermont; Thomas C. O'Callaghan, Massachusetts; Eugene S. Olcott, New York; George H. Owen, New York; Solomon H. Peck, New York; Thomas C. Pollock, Pennsylvania; John L. Portwood, Virginia; Harris Pushor, Maine; Wm. S. Robertson, New Brunswick; Marvin C. Rowland, New York; C. Allen Sears, Connecticut; Tr. C. Seiberling, Pennsylvania; John G. Sinclair, Canada West; George C. Smith, Massachusetts; James W. Southworth, Jr., Missouri; Pierre S. Starr, Connecticut; David T. Stowell, New Hampshire; Sylvester E. Strong, New York; A. E. Sumner, Connecticut; Wm. Taylor, Jr., New York; J. Mott Throop, New York; John T. Treacy, Pennsylvania; G. Kempton Turner, Virginia; Fort Van Keuren, New York; Wm. K. Van Reypen, New Jersey; Thomas C. Walton, Canada West; Daniel F. Wells, New York; Edward J. Whitney, New York; Thomas S. Yard, New York.

The annual prizes were awarded as follows:—Dr. Mott's silver medal, to W. H. Bates, New York; Dr. Mott's bronze medal, to W. H. Mather, Connecticut; Dr. Van Buren's first prize, to Eugene S. Alcott, New York; Dr. Van Buren's second prize, to W. H. Bates, New York; Dr. Metcalfe's first prize, to J. H. Mills, New York; Dr. Metcalfe's second prize, to A. S. Laubach, Pennsylvania.

The valedictory address was delivered by Prof. Van Buren.

University of Buffalo, Medical Department.—The annual commencement of this institution occurred on the 25th ultimo. The exercises were held in the American Hall in the presence of a large and highly respectable audience. The degree of Doctor in Medicine was conferred on the following gentlemen, by Hon. Millard Fillmore, Chancellor of the University, who accompanied the ceremony by a brief and appropriate address:—

John W. Stille, Otsego, Otsego Co., N. Y.; Thomas B. Minchen, Adrian, Lenawee Co., Mich.; William Robinson, Buffalo, N. Y.; Samuel W. Wetmore, Kingsville, Ashtabula Co., O.; Delos W. Harrington, Akron, Erie Co., N. Y.; John R. Stewart, North Cohocton, Steuben Co., N. Y.; P. Henry Clark, Ashland, Ashland Co., O.; Charles G. Robertson, Waterford, Oakland Co., Mich.; Elias S. Chapel, New Lyme, Ashtabula Co., O.; Abel G. Rathbone, New Lyme, Ashtabula Co., O.; Horace B. Northrop, Arcade, Wyoming Co., N. Y.; Solomon V. Frame, 2d, Depauville, Jefferson Co., N. Y.; John P. Blawis, Fort Miller, Washington Co., N. Y.; Eugene A. Chapman, Henderson, Jefferson Co., N. Y.; John W. Goodson, Bellevue, Huron Co., O.; Theodore W. Barton, Waterford, Erie Co., Pa.; Oscar E. Wainwright, Akron, Erie Co., N. Y.; John Cole, Lancaster, Erie Co., N. Y.; James S. Smith, Burford, Brant Co., C. W.; Edward Little, Newberry, Middlesex Co., C. W.; James W. Casey, Rochester, N. Y.; Horace Tupper, Buffalo, N. Y.; John Jenkins, Shelby, Orleans Co., N. Y.; John C. Wall, Oshawa, Ontario Co., C. W.; Andrew J. Haughton, Cambria, Niagara Co.; N. Y.; James S. Wilkin, Shawnee, Niagara Co., N. Y.; Charles W. Carrier, Newfield, Thompkins Co., N. Y.; Charles W. Colyer, Buffalo, N. Y.

From the *Buffalo Med. and Surg. Journal* we learn that the charge to the graduates was given by Prof. James P. White, and that it was a very able, appropriate, and practical address. He urged the graduates to remember that success in life mainly depended upon themselves; to trust nothing to fortune or fancied position; to rely chiefly upon their own unaided efforts with inflexible purpose; to be always painfully alive to

the safety and welfare of their patients; to be close students and careful observers; to explore with enthusiasm the broad field of medical science; to avoid quackery themselves, and to remember that public confidence in scientific acquirement is steadily onward, and will progress in exact proportion with the enlightenment of the community. The only exception to this rule was the clergy, who have done more harm than any other class by giving certificates of cures by quack remedies.

After the commencement exercises a sumptuous supper was provided for the graduates, curators, faculty, and invited guests, by Prof. T. F. Rochester, which passed off very happily.

Vermont Medical College.—Upwards of sixty students are already in attendance upon the spring session of this College, the only one in the State which continues its sessions during the present crisis in our national affairs.

Dr. C. L. Allen, late of the Castleton Medical College, has accepted the Chair of Theory and Practice of Medicine, recently tendered him by the Faculty, and enters upon his duties at the middle of the term. Dr. Allen is an excellent physician, and has been for several years past a successful practitioner in Middlebury. He is a member of the State Medical Board, and, since the inception of the measure, has had the exclusive charge of making up the State registration reports of marriages, births, and deaths. (Will the doctor furnish us a copy of them?)

Professor Carpenter, who has so ably filled the same chair for several years past, still retains that of Materia Medica, so that the College has now a complete and an excellent board of teachers in all the departments, and affords as good facilities for instruction and progress in the healing art as can be found outside of the great centers of medical instruction—the cities.

Hospital arrangements of the 5th Vermont Regiment.—The surgeon of this regiment, Dr. W. P. Russell, of Middlebury, seems to be making "innovations" upon the regular system of hospital practice, and prescribing for his patients remedies not mentioned at all in the "regulations." The only thing, it strikes us, which can save him from a vote of praise or censure for his temerity, is the entire success of the treatment. Just read the prescription and its wonderful effects. And we presume not a "wry face" was made at it by one of the patients.

"The hospital of the 5th, which had been located some two miles from camp, and consisting of a house and barn, (the house for the sick and the barn for the convalescent,) is about to be removed to the camp, and for the past week the proper authorities have selected those who may safely occupy their quarters in camp, and sending them in; at the same time those unable to withstand camp life for the present are to be sent to the General Hospital. I leave the reader to predict the object of this movement. I will tell you the means resorted to by our quaint Dr. Russell for successfully selecting those who were well enough to go to their quarters. During the past week they held two grand 'levees' at the hospital. The music for the last was furnished by two first-class violinists, selected from the Vermont Brigade, and engaged for this particular occasion. There was one thing only that marred the festivities, and that was the *very* limited number of the 'better' partners 'for the next set.' Not one to be seen. To meet this deficiency Dr. Russell was ready, and found efficient for the emergency. He selected a certain number of the most feminine-looking, most beardless, and had them attired in white and figured morning and sick gowns, and, although they presented for the most part a rather ghostly appearance, it was found the substitute answered a very good purpose. Well, Dr. Russell proclaimed to the multitude that those who did not choose to 'trip the light fantastic toe,' must be prepared to meet the alternative of going to the General Hospital. The measure was effectual. Out of some thirty invalids not more than one-third are checked for the General Hospital. Owing to the 'Army Regulations' not allowing an officer or soldier to speak in terms either of praise or censure, I will only say that Dr. Russell is considered a 'perfect brick' by those who have been under his charge. The sanitary condition of the whole Vermont Brigade has much improved of late, and I hope we shall be 'O. K.' before long."

Correspondence.

NEW YORK CORRESPONDENCE.

At the last meeting of the Surgical Section of the New York Academy of Medicine, presided over by the amenitous Dr. James R. Wood, Dr. Arnold, of Yonkers, read an able paper on railroad necessities, accidents, and all the various misfortunes incident to explosions, collisions, etc. etc. Dr. Arnold maintained, with emphatic zeal and becoming truth, that a company, fund, or something of the kind, should be formed, with a view to ameliorate the condition of passengers; the best method for securing a satisfactory result would be the paying a regular salary to compe-

tent surgeons at certain convenient distances from wayside mishaps. Villages are intersected by railroads, and, if men of prompt energy, coolness, and special emergency qualifications were appointed, their incomes would prove most gratifying if connected with certain railroad companies, who aid in no small degree in causing insurance firms to liquidate and make good what they have destroyed.

The paper was received in a favorable manner, and it is hoped that something definite will proceed out of this suggestive germ of philanthropic meditation.

Dr. Wood next rose and said that Dr. George K. Smith's "paper" was again before the Academy for discussion. Dr. Alfred C. Post made a few remarks to the effect that Dr. Smith had not exactly comprehended the intention or purport of his previous suggestions. There being no further pros and cons with regard to this learned paper on "Intra-capsular Fracture and its Relations," which has already occupied the attention of the Surgical Section during the entire winter, and from its first meeting, the next subject in order was that of "Tracheotomy." Dr. Raphael, of the New York Medical College, then rose and recommended the postponement of the subject till the next meeting. The doctor remarked that the operation was one of lasting importance, requiring vast knowledge, and no little experience. Moreover, as Dr. Voss had devoted so much time to the particular branch of diseases requiring this treatment, and performed the operation as frequently as, if not oftener than, any other surgeon in the city, he proposed that Dr. Voss open the discussion on the following occasion. Here the Society adjourned.

There has been more rheumatism in the city this year than is generally expected, even during an open winter. Diphtheria has prevailed with apparent luxurious impunity, returning, in some instances, to the same victim in less than two months. "Pars magna fui!"

I recently read in one of our journals that the tongue had been entirely and successfully removed from a patient, in England, for cancer. He recovered; eats and converses intelligently, finding it more difficult to pronounce K than any other letter. I find it difficult to pronounce this O—K!

Gourmet.

Filthy Streets.—Unless speedily cleansed, the most disastrous consequences to the health of the people must result from the filthy streets of the city.

ARMY CORRESPONDENCE.

Headquarters, 5th Regt., Excelsior Brigade, U. S. V.
Camp Magaw, Liverpool Point, Md., March 5, 1862.

A Case of Alleged Contusion from the Wind of a Cannon-Ball.

Messrs. Editors:—Military surgeons, I believe, without exception, unite in affirming that injuries cannot be inflicted by the wind of a passing ball, but popular belief tends to the contrary opinion, and there are also some in the profession who still adhere to the latter opinion. The experience of all the great military surgeons is, that cannon-balls may pass in the closest proximity to the body without inflicting the slightest injury; but popular opinion clings with its usual pertinacity to the opposite idea, and every old man-of-wars-man or old soldier fondly relates some case of which he declares he was an eye-witness, which proves, as he believes, the popular hypothesis. The case which I propose to describe will probably be heralded far and wide through the newspaper press as indubitable proof of the correctness of the popular belief, and, therefore, I propose to detail the facts of the case.

On the 28th of February last General Sickles was reviewing the 5th Regiment of his brigade upon a level piece of ground on the bluff at Liverpool Point, Maryland. While thus engaged, the enemy opened fire upon the regiment from a thirty-pound rifled Parrot gun placed upon a hill on the opposite bank of the Potomac, which is at this point nearly three miles wide. Captain R., one of the brigade staff, was walking near the edge of the bluff, when a shell from the enemy's gun passed within (as near as can be estimated) about from six to eighteen inches of his body, at about the height of the knee, and buried itself in the ground at a point a few feet distant, where it exploded, throwing the earth in every direction.

The shell was (judging from other shells which were fired from the same gun and failed to explode) a conical percussion shell, some twelve inches in length and four inches in diameter, and weighing thirty pounds.

As the shell whizzed past him, the captain involuntarily wheeled around, turning upon his left foot and swinging around his right, (the one toward the enemy.) He felt, as he swung around, a pain in his knee, and exclaimed, "*I've jumped around so quick, I've hurt my knee!*" In conversing about it afterward, he mentioned that, as the shell whistled by him, he "felt a sudden pressure" upon the side from which the shot came,

and it was a question with him whether he did not receive the injury from that pressure.

Upon examination, the skin upon the outer side of the knee was found ecchymosed. He applied to it a stimulating liniment, and in a few days it was well again.

This case is cited throughout the division as a positive case of injury from the wind of the ball. To my own mind it appears clear that the injury or ecchymosis was either produced by the sudden jump, as was his first impression, or it may have been done by a clod of earth thrown by the explosion of the shell, (he says it was thrown around and over him.) Several persons were standing within a few feet of the captain, and declare they felt the pressure described by him, to a greater or less extent. I have, however, given the facts, and the reader can draw his own deductions. J. T. Calhoun.

NEWS AND MISCELLANY.

Salting the Streets.—As a finale to the discussion which has agitated the city and the Councils during the few weeks past, we give the following report from Prof. Rogers of the University, to the Committee of Councils, and only add that the Committee made *their* report in accordance with the views herein expressed:—

"On the 5th ult., at noon, with the thermometer at 33 degrees in the shade, Prof. Rogers made two series of observations, one upon the materials trodden upon by persons in walking, and the other upon the atmosphere. He found the temperature of melted snow and salt upon the crossings in Eighth, Ninth, Tenth, Eleventh, Twelfth, and Thirteenth Streets to range from 27½ to 28 degrees, giving an average of 27·83. The temperature of an unmelted mixture of snow and salt, on various points in the same streets, ranged from 26½ to 27 degrees, giving an average of 26·78.

"During that afternoon and until nine P.M., he discovered that at an elevation of three feet above the ground, no essential difference existed between the atmosphere of the salted streets and that of those where no salt had been thrown; since, had such a difference existed, the thermometer should have fallen more rapidly and to a greater extent so soon as it was taken from an unsalted to a salted street, and then should have risen again, or shown a more tardy rate of fall, upon being removed from a salted to an unsalted avenue.

"He moreover asserted that salt, as used in the quantity employed by the city railroad companies for hastening the removal of snow from their tracks, produces a mixture intensely cold to the feet is *erroneous*, since the average reduction of temperature in the liquid mixture of snow and salt was, at the places of experiment, only 4·17 degrees below that of snow water, and the average reduction in the unmixed mixture was but 5·22 degrees below that of snow itself.

"In the second place, he demonstrated that a like error has prevailed in supposing that the atmosphere breathed by men and horses over the *salted* streets is *greatly colder* than that which they inhale on the unsalted thoroughfares, the table showing that at an elevation of three feet above the ground there is no appreciable difference between the temperature of the air resting over the salted ground and that of the snow alone. That the air immediately in contact with the salt and snow mixture is a little colder than that resting upon the snow itself, no one will doubt; but so little is the air a conductor of heat, that this small difference of temperature does not, as proved by experiment, extend to any considerable distance into the upper strata.

"In conclusion, he observes that salt does not itself volatilize or evolve either of its constituents, and being an antiseptic or corrective of putrefaction, tends, so far as it exerts any influence, to preserve the atmosphere, over the salted thoroughfares, *pure* and *salubrious*.

"That the practice of salting the railroad tracks is attended by the production in the liquid and semi-liquid measure of a temperature not more than a few degrees colder than that of melting snow.

"That the use of salt, while it accelerates the thawing of snow, likewise, by forming a solution less readily frozen at night or in cold weather than simple snow water, promotes and greatly hastens the drainage of the city, and thereby in proportion curtails the period to which the feet of persons and horses are subjected to the cold.

"That this depression of temperature is only temporary, and continues just so long as the snow is melting. The solution, when once formed, obeys the law of all other liquids, and may be warmed by the sun or other influences.

"That the atmosphere at the elevation above the surface at which men and animals on the street breathe it, is not perceptibly colder by the use of salt.

"That, so far as there is any hygrometric change produced in the air, the effect of salt is to render it more free from moisture, and practically drier. This effect is at most but small, and only occurs near the surface of the cold mixture.

"That leather is penetrated by salt and water less readily than by pure snow water, and, in consequence of there being a small percentage of salt present, it is not, when wet with it, sensibly more difficult to dry than when wet with water alone.

"That there is nothing corrosive in the solution of salt and water, nor any specific power to rot or disintegrate leather or fade colors."

The New Episcopal Hospital.—The Managers of the Episcopal Hospital have issued their yearly report, embodying some philanthropic statistics, with an account of the new hospital building:

The current expenses of the hospital for the year, exclusive of building operations, have amounted to . .		$5753 97
Less advertising and printing	$53 79	
Less improvements and repairs	320 46	
		374 25
		$5379 72
Less cost of medicines for 5237 dispensary patients, at 12 cents each,		628 44
Net cost of maintaining the hospital,		$4751 28

Of this sum, the amount received from the collections in the churches on Thanksgiving Day was $2704 31.

The whole number of patients treated in the Hospital during the year past is 360. The largest number of patients at any one time was 35. The daily average number was 28. The average time of residence of each patient was 26 days.

The number of patients who have received the benefits of the dispensary practice is 5237, making an average of more than fourteen per day throughout the entire year. The whole number of patients prescribed for since the opening of the Hospital is twenty-four thousand four hundred and fifty-one.

The increase in the facilities of the institution will have the effect of adding largely to the drain on the treasury. It is thought that not less than $21,000 a year will be required to support the one hundred and forty beds which the new wing will accommodate.

The chapel, so far as the exterior is concerned, is entirely finished. And, in reference to the interior, the work is so far advanced that it may readily be completed by an early period in the spring.

The west wing is all under roof, and the windows are all glazed. The wards of the wing are in such a state of forwardness that they will probably be ready for the reception of tenants by the first of July. The main, or central building, has all the walls completed, except a portion of the front and one of the gables. The roof is closed in, and the unfinished portion is well protected for the winter. The amount already subscribed toward the erection of the building has reached the sum of $120,000. Not less than $80,000 more will be required for the erection of the eastern wing, and for carrying forward the whole structure, with its adjacent grounds, to a state of entire completion. The amount of money expended in the erection of the building during the year is $46,453.

Summit House Hospital.—This is a new hospital lately fitted up for the reception of sick and wounded soldiers by the government. It is located on the Darby Road, a short distance this side of the Blue Bell. It is under the charge of Dr. Winthrop Sargent as surgeon-in-chief, together with Dr. John M. Fox, of this city, as assistant surgeon. The hospital was opened on Friday last, March 7th.

University of Pennsylvania.—The number of students attending the Medical Department of this institution during the session just closed was 309, of which 218 were from Pennsylvania. The annual commencement occurred on Thursday last, when the valedictory address was delivered by Professor Leidy.

Both the medical colleges have fallen off largely in point of numbers on account of the crisis in our national affairs.

Long Island College Hospital, (N.Y.)—Four hundred and nineteen patients were treated in the Long Island College Hospital during the month of February: 230 were medical cases, 41 diseases of women, and 148 surgical cases. The diseases are classified as follows: Of the nervous system, 15; general system, 11; digestive organs, 60; genito-urinal organs, 59; lungs, 48; heart, 1; throat, 6; skin, 34; bones and joints, 14; eye, 8; ear, 1; fevers, 17; rheumatism, 8; fractures, 6; dislocations, 1; abscesses and felons, 20; ulcers, 9; contusions, 10; wounds, 11; burns, 3; hernia, 2; goitre, 1; tumors, 1; enlarged glands, 5; foreign bodies removed, 1; tongue-tie, 2; club-foot, 1; vaccinations, 14; unclassified and minor cases, 50; 700 prescriptions were dispensed.

Albany, N.Y., Medical College.—The number of students in attendance during the session of 1861 was 68. The number of graduates, 21.

Hospitals in Great Britain.—There are 167 hospitals in Great Britain, as follows: England, 76; Scotland, 15; Ireland, 76.

Productiveness of Animalcules.—Pritchard tells us Ehrenburg found that a single animalcule lived nine days; during the first twenty-four hours it was developed by transverse self-division, into three animals; these in twenty-four hours formed two each in the same manner; so that by self-division (without ova) these animalcules increase three or four fold in twenty-four hours, and may thus produce a million from a single animalcule in ten days. Such are the amazing powers of reproduction conferred upon these humble creatures, powers which are fully employed when the surrounding circumstances are favorable, and which, in the aggregate, change the condition of large masses of matter, and bring within the circle of life millions and millions of particles every minute of the day.—*Slack's Marvels of Pond Life.*

Physiological Effects of the Electric Telegraph.—It appears that constant watching of the needles of electric dial-plates begins at length to produce an unpleasant effect upon the eyes of some of the operators. After laborious service, and

especially after service at night, the retina is frequently so affected that for a considerable time all objects appear double, and shrouded in a haze. This affection is developed only at those stations where the needle telegraph is employed. This telegraph is no longer used in France; it is but little used in England, except the needle telegraph of Wheatstone. In France the printing telegraph is preferred. Two new systems are about to be adopted; the first that of Hughes, an American, the other that of Caselli, of Florence. The first prints the Roman letters with a velocity which permits the transmission of twenty or thirty words per minute; the second, called the *pantelograph*, reproduces everything autographically, writing, linear drawings, portraits, landscapes, etc. etc., with a velocity of eight to ten words of ordinary writing, or sixty words written with the characters of Morse.

Dr. Bedford's work on Diseases of Women and Children has been translated into French and German, a circumstance which is worthy of note, as a compliment not often paid to an American author on medical subjects.

Instantaneous Black Hair-Dye.—Those who have occasion to use a hair-dye to improve their external appearance, or to conceal from their friends the approach of age and venerable gray hairs, will find in the following recipe the ingredients of the hair-dyes generally in use, and will be able to save some expense by procuring it for themselves. Any druggist will put it up for a trifle. We find it in the *Druggists' Circular:*—

"Dissolve 30 grains of nitrate of silver in 3 drachms of distilled water; then add liquor ammoniæ q. s. to redissolve the precipitate which forms at first, and make the whole measure 6 fluid drachms. Preserve it in a glass-stoppered bottle. In another bottle dissolve 10 grains of gallic acid in 2 drachms of alcohol or cologne and 6 drachms of water. The latter liquid is first applied to the hair, and, when dry, the solution of silver over it. The directions are the same that will be found on any hair-dye preparation sold by perfumers."

Suicide in France.—Three thousand eight hundred and ninety-nine is the exact figure, which represents a daily average of more than ten. It would seem that the large majority of suicides are of males. Not more than 842 of the total number of self-murders were committed by women, 16 by children, and 3057 by men. Disappointed passion contributes less than we should expect from French society, and mainly to the male account. Thirty-eight men and 11 women, being all of ninety years and upward, may be set down as self-destroyers who sought nothing but to escape the tedium and painful decays of age. The majority of cases were with persons under sixty years old and over forty, and they occurred with greatest frequency in April, May, June, and July. In England, also, November has by no means the fatal pre-eminence ascribed to it in popular belief; and the influence of weather is not in any way easily connected with these phenomena. The modes of suicide adopted were, by the statement we quote, very few and inelaborate. Hanging and drowning were resorted to in 2883 cases; suffocation with charcoal, in 271; shooting with gun or musket, in 206; with pistols, in 189. Death by sharp instruments was procured in 153 instances; by jumping from windows or high places, in 110; while the use of poisonous drugs contributed only 93 names to the ghastly list. These figures seem to us an illustration of the impulsive character of the crime. That poison should be so infrequently resorted to, is due, we think, to that cowardice which is the characteristic of suicides, and which prevents them from forcing their way to death by so painful a gate. The general ignorance of chemistry, and the restrictions imposed upon the sale of drugs in France, are additional reasons why toxical suicides occupy the lowest place in the list. By strangulation, drowning, and shooting, something like eight-ninths of these self-murders were effected.—*Dublin Med. Press.*

Sufferings of the Wounded at the Capture of Fort Donelson.—The physical suffering of all who were engaged in the attack on and capture of Fort Donelson probably exceeded that of any previous battle on this continent. The temperature was lower than on the occasion of the famous winter fight at Eylau, and the misery of the men, from wet and frozen clothing, and insufficient food, was perhaps as great. On Thursday, the first day of the fight, the temperature was but ten degrees Fahrenheit, and snow fell during the day and the succeeding night. Feet and hands were, in many instances, frozen. It is believed that many of the wounded died where they fell from freezing, as the armies were so near together that neither belligerent could venture out to relieve the wounded or remove the dead. It is said that some of the wounded laid in the field from Friday until late on Sunday, and, when rescued, were stiff with cold and covered with snow.

Books and Pamphlets Received.—Gross's Surgery, 2d edition, two volumes; from Blanchard & Lea, publishers. Gray's Anatomy, Descriptive and Surgical; from Blanchard & Lea, publishers, 2d edition. Diseases of Women and Children, by Gunning S. Bedford, M.D.; 7th edition; from the author. Wm. Wood, publisher, N. Y. Medical Society of New Jersey, Transactions, 1862. Medical Topography of Camden County, N. J., by O. H. Taylor, M.D.; from the author.

DIED.

Leib.—On the 8th instant, in this city, Eliza, wife of the late Henry F. Leib, M.D., in the 49th year of her age.

Mitchell.—On the 8th inst., B. Rush Mitchell, M.D., U. S. N. in the 41st year of his age.

Thomas.—At Fortress Monroe, Va., January 18th, Charles K. Thomas, M.D., Assistant Surgeon 11th Pennsylvania Cavalry, in the 25th year of his age.

DR. McMUNN'S ELIXIR OF OPIUM.

This is the Pure and Essential Extract from the Native Drug.

It contains all the valuable medicinal properties of Opium in natural combination, to the exclusion of all its noxious, deleterious, and useless principles, upon which its bad effects depend.

It possesses all the sedative, anodyne, and antispasmodic powers of Opium—

To produce sleep and composure. To allay convulsions and spasmodic action.
To relieve pain and irritation, nervous excitement, and morbid irritability of body and mind, etc.

And being purified from all the noxious and deleterious elements, its operation is attended by

No sickness of the stomach, no vomiting, no costiveness, no headache,
Nor any derangement of the constitution or general health.

Hence its high superiority over Laudanum, Paregoric, Black Drop, Denarcotized laudanum, and every other opiate preparation.

In consequence of the exclusion of those deleterious principles from the Elixir of Opium, it is not liable to derange the functions of the system, and will be found invaluable for all cases in which the long-continued and liberal use of opiates is indicated and necessary to allay pain or spasmodic action, and induce sleep and composure, as in cases of fractures, burns, scalds, cancerous ulcers, and other painful affections.

THE ELIXIR OF OPIUM IS GREATLY SUPERIOR TO MORPHINE.

1. In its containing all the active medicinal virtues of Opium in native combination, and in being its full representative, while Morphine, being only one of its principles, cannot alone, and that in an artificial state of combination, too, produce all the characteristic effects of so triumphant a remedy, when several of its other valuable principles are excluded.
2. In all its effects, the Elixir is more characteristic, permanent, and uniform than any of the *artificial compounds* of Morphine.
3. And as a *Preparation*, it is not liable to decompose or deteriorate, like the *Solutions* of Morphine, and thus is obviated a serious objection, which has prevented the latter from being used with precision and effect.

To speak summarily, the Elixir of Opium, as a remedy, may be adopted in all cases in which either Opium or its preparations are administered, with the certainty of obtaining all their salutary and happy effects, without being followed by their distressing and pernicious consequences.

The following letter from Dr. Reese fully confirms the above, and commends itself to the attention of the profession and the public:—

NEW YORK, *January* 11, 1859.

Messrs. A. B. & D. SANDS: *Gentlemen*—I have been familiar with the history of the "Elixir of Opium" from the time it was first introduced to the profession by Dr. McMunn, and have continued to prescribe the same in public use and private practice since he disposed of his interest in it to you in 1841. Of its value, and the purity of the drug from which it is prepared, the best evidence is found in its wide-spread popularity and use among the profession in our own and other countries, and in all our civil and military hospitals, in which it has become a standard article. It is now prescribed by physicians and surgeons everywhere, when the positive medication of Opium is indicated without the drawbacks in certain pathological conditions involving the nervous system, by idiosyncrasy or otherwise, which are inseparable from the ordinary spirituous or vinous tinctures, or the salts of Morphia. Its extended use has led to the introduction of spurious imitations, against which you have done well to guard the profession and the public. The fact that the pharmaceutical journals have so frequently proposed and announced "substitutes" for McMunn's Elixir of Opium, and published so many formulæ for its officinal imitation, is the very highest attestation to the merits of the article as prepared by you. Knowing as I do its merits, I most cordially express my desire that its remedial virtues may be more extensively known.

Yours respectfully,

D. MEREDITH REESE, M.D., LL.D.,
Late Vice-President of the American Medical Association; Resident Member of the New York Academy of Medicine; Editor of the American Medical Gazette, etc.

☞ NOTICE.—**A. B. & D. SANDS** having purchased of Dr. McMUNN all his right, title, and interest in this article, and having been the sole Proprietors since 1841, and by whom it has been prepared during that period, respectfully inform dealers and consumers that no Elixir of Opium will hereafter be genuine unless having their signature on the outside wrapper; and all orders from the "Trade" must be addressed, as heretofore, to A. B. & D. SANDS, Wholesale Druggists, 141 William Street, corner of Fulton, New York.

SOLD ALSO BY DRUGGISTS GENERALLY.

June 28—61-62—12t.

32*

THE DISEASES OF WOMEN AND CHILDREN.

BY GUNNING S. BEDFORD, A.M., M.D.,

Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; Author of the Principles and Practice of Obstetrics.

SEVENTH EDITION, CAREFULLY REVISED. 8vo. 653 pp.

WILLIAM WOOD, 389 BROADWAY, NEW YORK.

Price $3.25, by Mail, free of postage.

The rapid and wide-spread circulation of this eminently practical work is, we think, without precedent. It is a storehouse of knowledge for the student and practitioner of medicine—full of practical precepts and bedside information. Rarely has any medical publication met with such universal commendation from the medical press, both at home and abroad. It has been so highly appreciated in Europe, that it has received the unusual compliment of a translation into the French and German languages.

From the American Medical Times.

"Successful as the work has been at home and abroad, we were not prepared to see it achieve a success exceedingly rare in the history of American medical authorship, viz., *a Translation into the French and German Languages.* We congratulate the author upon this high compliment paid to his labors in the still new field of uterine pathology, where so many struggle vainly for reputation. While this translation is the highest possible acknowledgment of the value of Dr. Bedford's labors, it secondarily reflects creditably upon the rising importance of the American school of medicine."

From the N. Y. Jour. of Med. and the Collateral Sciences.

"We hail the advent of such a work, abounding in practical matter of the deepest interest, and illustrated by principles and laws ordained by nature. Nor can we refrain from expressing our surprise and gratification at finding the book so remarkably exempt from the superficial views that abound in the great thoroughfare of medicine. The rapid sale of this work we believe to be unprecedented in the history of medical literature in this country, which must be highly gratifying to the author, showing, as it does, the degree of estimation placed upon his labors by the medical public."

From the British and Foreign Med.-Chir. Review.

"We are quite sure that the work will be a welcome addition to professional libraries in Great Britain as well as America."

From the Cincinnati Medical Journal.

"We think this the most valuable work on the subject ever presented to the profession. We have perused every page of the book with interest, and speak, therefore, from personal knowledge."

From the London Lancet.

"A careful perusal of Dr. Bedford's book has led us to believe that its value will continue to be acknowledged, and the author recognized as a most able and acute practitioner of medicine. The work is of the most practical character; everything is made to tend toward the relief and treatment of disease, and remarkable skill is shown in quickly arriving at an accurate diagnosis. To get at once to the point is the pervading characteristic of the author's teachings. We cordially recommend it to all practitioners and students of medicine."

From the London Medical Times and Gazette.

"It is to be regretted that we have not more such books in Great Britain."

From the London British Medical Journal.

"The style of the author is very graphic. The book not only proves Dr. Bedford to be a sound physician and an excellent clinical teacher, but it also affords evidence of an extensive acquaintance on his part with the literature of his subject on this side of the Atlantic."

From the Gazette Medicale, Paris.

"An examination of this work convinces us that the author possesses great talent for observation, and that his opinions are sound and practical. He shows an intimate knowledge of the doctrines of the ancients and the opinions of the moderns. The variety of instruction contained in this volume, the ability with which it is presented, and the truthful practical character of the doctrines advanced, give to it very great value."

From Rankin's Half-Yearly Abstract of the Med. Sciences.

"The workingmen in America are always on the look-out for the new lights rising over the Old World, and they often too hastily adopt, as the pure gold of science, the crude lucubrations which must find place with more valuable matter in the weekly medical press. But this observation does not apply to our author, who is creditably known by other works, and in the one before us shows himself to be a judicious physician, anxious alike for the good of his patients and of his pupils; one who has acquired the happy art of teaching how to get at the characteristics of disease, and how to drag at the chain of effects, until the mind grasps the first link in the chain."

From the New York Medical Times.

"The subjects have been developed with no ordinary powers of clinical instruction."

From the Philadelphia Medical Examiner.

"We have been both pleased and instructed by a perusal of the book, and confidently recommend it, therefore, to the profession, as an excellent repertorium of clinical medicine. The eminently practical ideas of the author, clothed in simple and perspicuous language, are delivered in quite an attractive, affable, and off-hand manner."

From the Charleston Medical Journal and Review.

"It is not often that British critics commend an American book; so when their approval is obtained, we may rest assured that the work commended is of no ordinary merit. Dr. Bedford's book is characterized by Dr. Churchill as '*worthy of its author, a credit to his country, and a valuable mine of instruction to the profession at large.*' We have read every page of the work, and feel called upon to say that we regard it the most valuable contribution on the subject ever offered to the profession."

From the Virginia Medical and Surgical Journal.

"A work of great practical interest—one well calculated to interest and instruct the busy practitioner; it points out to him the most modern therapeutical agents, and their method of administration; and, above all, gives beautiful and satisfactory explanations, physiologically, of the symptoms of disease. This latter quality is a great merit of the book. As a faithful representation of the daily labors and duties of a physician of our day, and as an accurate delineation of the diseases of women and children, it is well deserving of our praise."

From the Dublin Quarterly Journal of Medical Science.

"We were actually fascinated into reading this entire volume, and have done so most attentively; nor have we ever read a book with more pleasure and profit. There is not a disease connected with infancy or the female system which is not most ably discussed in this excellent work."

From the New Jersey Medical Reporter.

"Professor Bedford's book is a good one. We like it, for we can digest a dinner over it without going to sleep, and that is more than we can say of most medical books."

From the Midland Quarterly Journal of Med. Sciences, London.

"To read this work is to be struck with its truthfulness and utility; we find all that is useful in practice ably communicated and elegantly expressed. American works are not generally read on this side the Atlantic, but we recommend Dr. Bedford's book as worthy of the very best attention of the profession."

From the Philadelphhia Medical and Surgical Journal.

"We have said, on former occasions, that the man who will bring forward *clinical* or practical instruction to bear upon the medical teachings of our country, will be immortalized. We want practical observations—fresh from the bedside. Dr. Bedford's volume is drawn from an extensive clinic, founded by him in the University of New York, and is fortified by much reading and research. This is a good book, and the profession owes Dr. Bedford hearty thanks for the labor he has bestowed upon it."

From the Southern Med. and Surg. Journal, Augusta, Georgia.

"The work before us is eminently practical, and therefore valuable as a contribution to medical knowledge. Prof. Bedford's extensive opportunities have enabled him thus to bring together a large number of the most interesting cases of female and infantile affections, and to indicate his views of their treatment. In the accomplishment of the task, the author has evinced a degree of discernment which will, doubtless, add materially to his already extended reputation."

From the New Hampshire Journal of Medicine.

"No one can read this book without becoming convinced that it contains much valuable instruction, and is the result of a large experience in this specialty."

From the Boston Medical and Surgical Journal.

"The work contains graphic descriptions of the diseases of women and children, with judicious advice as to treatment."

2t—aw.

MEDICAL WORKS

PUBLISHED BY

J. B. LIPPINCOTT & CO.,

PHILADELPHIA.

Will be sent by mail, postpaid, on receipt of the price by the Publishers.

MACLEOD'S
SURGERY OF THE CRIMEAN WAR.

NOTES ON THE SURGERY OF THE WAR IN THE CRIMEA, with Remarks on the Treatment of Gunshot Wounds. By GEORGE H. B. MACLEOD, M.D., F.R.C.S., Surgeon to the General Hospital in Camp before Sebastopol, Lecturer on Military Surgery in Anderson's University, Glasgow, etc. etc. One vol. 12mo. $1.50.

SUMMARY OF CONTENTS.

Chap. I.—The History and Physical Characters of the Crimea. The Changes of the Seasons during the occupation by the Allies. The Natives, and their Diseases.

Chap. II.—Drainage of the Camp. Water Supply. Latrines. Food. Cooking. Fuel. Clothing. Housing. Duty. Effect of all these combined on the health and diseases of the soldiers. Hospitals. Distribution of the Sick. Nursing, male and female. Transport.

Chap. III.—The Campaign in Bulgaria, and its effects on the subsequent health of the troops. The Diseases which appeared there, and during the Flank March, as well as afterward in the Camp before Sebastopol.

Chap. IV.—Distinction between Surgery as practiced in the Army and Civil Life. Soldiers as Patients, and the character of the Injuries to which they are liable. Some peculiarities in the wounds and injuries seen during the war.

Chap. V.—The "Peculiarities" of Gunshot Wounds, and their General Treatment.

Chap. VI.—The use of Chloroform in the Crimea. Primary and Secondary Hemorrhage from Gunshot Wounds. Tetanus. Gangrene. Erysipelas. Frost-bite.

Chap. VII.—Injuries of the Head.

Chap. VIII.—Wounds of the Face and Chest.

Chap. IX.—Gunshot Wounds of the Abdomen and Bladder.

Chap. X.—Compound Fracture of the Extremities.

Chap. XI.—Gunshot Wounds of Joints. Excision of Joints, etc.

Chap. XII.—Amputation.

FROM SURGEON-GENERAL HENRY H. SMITH.

GENTLEMEN:—I thank you for the copy of Macleod's Surgery as published by you.

With the English Edition I am very familiar, and regard it as one of the best of the modern works on Military Surgery.

Its republication at the present moment is a valuable contribution for our Army Surgeons, all of whom should have it.

Very truly, yours,

HENRY H. SMITH.

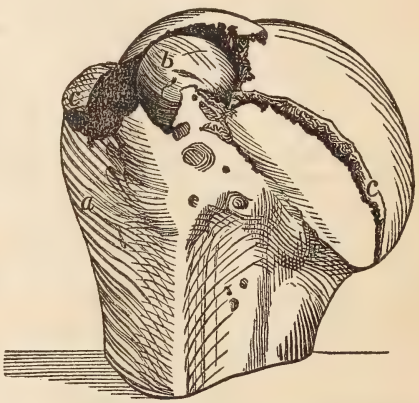
MESSRS. J. B. LIPPINCOTT & CO.
Philadelphia, Dec. 3, 1861.

GUTHRIE'S
SURGERY OF WAR.

COMMENTARIES ON THE SURGERY OF THE WAR

IN PORTUGAL, SPAIN, FRANCE, AND THE NETHERLANDS,

From the battle of Roliça, in 1808, to that of Waterloo, in 1815, with additions relating to those in the CRIMEA, in 1854–55; showing the improvements made during and since that period in the great art and science of surgery on all the subjects to which they relate. By G. J. GUTHRIE, F.R.S. One vol. 12mo. [Nearly ready.]



a. The head of the humerus sawn off below the tuberosities.
b. The ball.
c c. Fractures of the head of the bone.

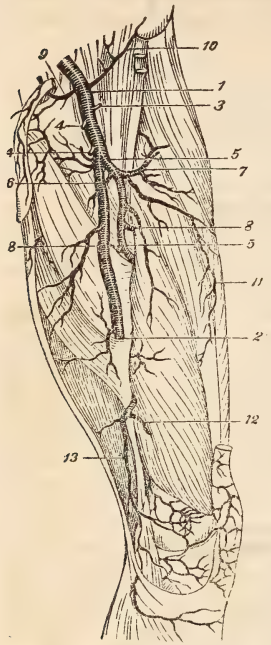
[FROM THE PREFACE TO THE SIXTH LONDON EDITION.]

"The rapid sale of the fifth, and the demand for a sixth edition of this work, enable me to say that the precepts inculcated in it have been fully borne out and confirmed by the practice of the Surgeons of the army in the Crimea in almost every particular. * * * They have performed operations of the greatest importance at my suggestion, that had not been done before, with a judgment and ability beyond all praise; and they have modified others to the great advantage of those who may hereafter suffer from similar injuries.

* * * * * * * *

"The precepts laid down are the result of the experience acquired in the war in the Peninsula, from the first battle of Roliça, in 1808, to the last in Belgium, of Waterloo, in 1815, which altered, nay, overturned, nearly all those which existed previously to that period, on all the points to which they relate. Points as essential in the surgery of domestic as in military life. They have been the means of saving the lives, and of relieving, if not even of preventing, the miseries of thousands of our fellow-creatures throughout the civilized world."

Agnew's Practical Anatomy. A new arrangement of the London Dissector, with numerous modifications and additions: containing a concise description of the Muscles, Nerves, Blood-vessels, Viscera, and Ligaments of the Human Body as they appear on Dissection. With Illustrations. By D. Hayes Agnew, M.D., Lecturer on Anatomy, and Surgeon to the Philadelphia Hospital, (Blockey.) One vol. 12mo. $1.00.



This work has been adapted to the use of the American student by altering the arrangement and changing the nomenclature in many cases; by adding the ligamentous system; by illustrations; by erasing what was unnecessary, and presenting the whole as nearly as possible in the topographical order. The work, as now published in this American edition, has been prepared with a single eye to the faithful economy of the student's time.

Beck's Elements of Medical Jurisprudence. Eleventh edition. By Theodric Romeyn Beck, M.D., LL.D., Professor of Materia Medica in the Albany Medical College, etc.; and John B. Beck, M.D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the City of New York, etc. With notes by an association of the friends of Drs. Beck. The whole revised by C. R. Gilman, M.D., Professor of Medical Jurisprudence in the College of Physicians and Surgeons of New York. Two vols. 8vo. $10.00.

Beck's Medical Jurisprudence has so fully established its character as a standard on that subject, by its numerous editions, both in England and this country, that it is unnecessary to speak of its merits. Mr. Warren, the distinguished English legal writer, in his introduction to Law Studies, says of it:—

"The best work, by far, upon the subject of forensic medicine, of all those which have come under the author's notice, is the Medical Jurisprudence of Dr. Beck, which is not only an instructive, but a highly interesting work."

The eleventh American edition, which you have afforded me the opportunity of examining, is evidently a very great improvement upon all previous editions. The large amount of new matter accumulated by Dr. T. R. Beck before his death, has been judiciously introduced by his able professional friends, to whom it was entrusted, and has rendered the work as complete as it is invaluable.

Very truly, yours,

GEO. SHARSWOOD.

Louisville, Ky, Dec. 24, 1859.

I am glad to have the opportunity to read the last edition (1860) of Beck's Medical Jurisprudence. This is the best work on the subject of general medical jurisprudence ever published; and the labors of Dr. Gilman have contributed much to the value of the present edition.

Very respectfully,

HENRY PIRTLE.

Roslyn, N. Y., Jan. 13, 1860.

I am well acquainted with the great merits of Dr. Beck's work, which I have been in the habit of considering as the only real cyclopedia of medical jurisprudence in our language. . . . . It is so invaluable both to law and medical practitioners, that I cannot conceive of any work extant which will, in all particulars, furnish such orthodox opinions.

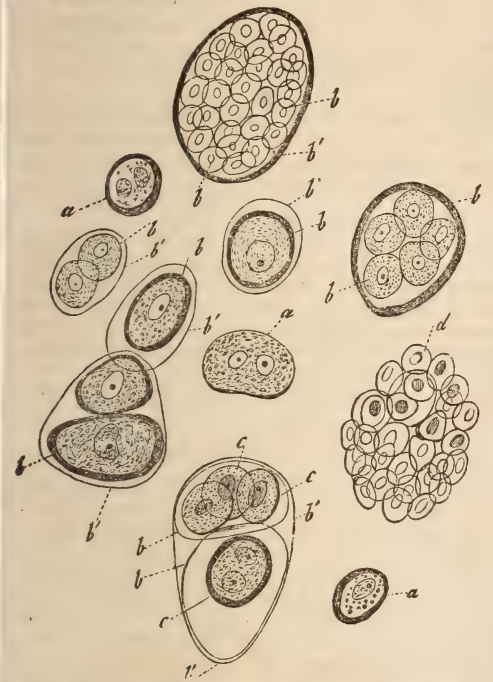
Respectfully yours,

JNO. ORDRONAUX.

Leidy's Human Anatomy: An Elementary Text-book for Students. By Joseph Leidy, M.D., Professor of Anatomy in the University of Pennsylvania. Elegantly illustrated from numerous original drawings. One vol. 8vo. $5.00.

View of the Heart, with the anterior portions of the ventricle removed.

Kolliker's Manual of Human Microscopical Anatomy. By A. KOLLIKER, Professor of Anatomy and Physiology in Wurzburg. Translated by GEO. BUSH, F.R.S., and THOMAS HUXLEY, F.R.S. Edited, with notes and additions, by J. DA COSTA, M.D. Illustrated by 313 engravings on wood. One vol. 8vo. $3.75.



Cartilage cells from a fibrous, velvety, articular cartilage of the condyle of the femur of man, magnified 350 diameters.

It would be useless for us to attempt a review of this work, for the text is so fully illustrated by engravings, and is so intimately associated with them, that we cannot extract any part as a sample of the style, without weakening its force, for the want of its accompanying illustration. The book must be read and studied before an adequate idea can be formed of its value and excellence. The book comes from such high authority, and is indorsed by such competent judges, as to make it at once indispensable to the student of microscopic anatomy. We hope it will have an extensive circulation.—*Western Lancet.*

The reputation of Professor Kolliker, acquired by his former and larger work on microscopical anatomy, will be enhanced by this text-book on Histology, for such it is destined to be pre-eminently. The text is fully illustrated by engravings, greatly adding to the value of the work, and accompanied by explicit explanations of the figures. We commend it to the profession, and to students especially, as worthy of their patronage.—*New York Medical Gazette.*

Storer's Criminal Abortion. Criminal Abortion in America. By H. R. STORER, M.D. One vol. 8vo. $1.00.

Mitchell's Materia Medica and Therapeutics. Materia Medica and Therapeutics, with ample illustrations of practice in all the departments of medical science, and copious notices of toxicology; the whole adapted to the wants of medical pupils and practitioners. By THOMAS D. MITCHELL, M.D., Professor of the Theory and Practice of Medicine in the Philadelphia College of Medicine, etc. etc. Second edition. One vol. 8vo. $4.00.

We take much pleasure in noticing this able work of Dr. Mitchell, and can assure our readers it is one of the best works on materia medica and therapeutics that has been published. It is written in a style that interests and instructs at the same time.—*Boston Med. and Surg. Journal.*

This new work, upon an old subject, will be found to embody a variety and amount of practical information in this department which are not to be met with in any one of the numerous treatises on materia medica or therapeutics, or both, with which the profession has been favored. The ample illustrations of practice in all the departments of medical science, with the very ample notices of toxicology, etc., render it a valuable book for students, and also adapt it for reference by practitioners, both of which purposes are subserved by its alphabetical arrangement.—*N. Y. Medical Gazette.*

Thomson's Domestic Medicine: A Dictionary of Domestic Medicine and Household Surgery. By SPENCER THOMSON, M.D., L.B.C.S. Edinb. First American, from the last London edition. Revised, with additions, by HENRY H. SMITH, M.D., Professor of Surgery in the Pennsylvania University. One vol. 12mo. $1.50.

This work has received the highest encomiums from the critical journals of the day. "Many a useful life," remarks a British periodical, "might have been spared, and many an insidious disease checked in the bud, had such works as that of Dr. Thomson been earlier in existence. To the traveler by sea or by land, to the settler and the emigrant, far from medical aid, it must prove invaluable."

The work has been carefully adapted to the American climate and habits by Dr. Henry H. Smith, of Philadelphia, whose contributions to the volume have greatly added to its value. It is the standard book of domestic medicine. The arrangement of the subjects in alphabetical order renders it extremely convenient for prompt reference and consultation.

Bernard and Robin on the Blood.—Notes of M. Bernard's Lectures on the Blood, with an Appendix, giving an account of the latest studies of M. Robin, the celebrated microscopist. By WALTER FRANKLIN ATLEE, M.D. One vol. 12mo. Cloth, 75 cents.

Memoranda Medica; or, Note-book of Medical Principles. By HENRY HARTSHORNE, M.D., Professor of the Theory and Practice of Medicine in the Medical Department of Pennsylvania College. One vol. 12mo.

Longmore's Gunshot Wounds. A Treatise on Gunshot Wounds. By T. LONGMORE, Deputy Instructor of Hospitals, Prof. of Military Surgery at Fort Pitt, Chatham. In two Parts. One vol. 12mo.

Part I. Gunshot Wounds in General.
Part II. Gunshot Wounds in Special Regions of the Body.

Florence Nightingale's Notes on Hospitals. Notes on Hospitals: being Papers read before the National Association for the Promotion of Social Science, at Liverpool, in October, 1858, with evidence given to the Royal Commissioners on the state of the Army in 1857. By FLORENCE NIGHTINGALE.

Acton on the Urinary Organs. A Practical Treatise on Diseases of the Urinary and Generative Organs in both Sexes. Part I.—Nonspecific Disease. Part II.—Syphilis. By WILLIAM ACTON, late Surgeon to the Islington Dispensary, and formerly Externe at the Female Veneral Hospital, Paris. From the second London edition. With additional Illustrations and Colored Plates. One vol. 8vo. $4.00.

This work is intended to be used by the student as a complete text-book on the subjects of which it treats; and, at the same time, to supply data for the surgeon desirous of learning the most modern treatment of the protean forms of Syphilis, as well as materially to assist the practitioner who, in the witness-box, is liable to be cross-examined on many of the most intricate questions of generation, absorption, or contagion.

Campbell's Secretory and Excito-Secretory System. Essays on the Secretory and the Excito-Secretory System of Nerves, in their relations to Physiology and Pathology. Comprising, I. A new classification of febrile diseases. II. An exposition of the ganglionic pathology of all continued fevers, as illustrated in typhus and typhoid fever. III. The Prize Essay on the excito-secretory system of nerves in its relations to physiology and pathology. IV. A letter to Dr. Marshall Hall, of London, claiming priority in the discovery and naming of the excito-secretory system of nerves. By HENRY FRASER CAMPBELL, A.M., M.D., one of the Vice-Presidents of the American Medical Association, and Professor of Anatomy in the Medical College of Georgia at Augusta. One vol. 8vo. $1.25.

Ricord on Venereal Diseases. A Practical Treatise on Venereal Diseases; or, Critical and Experimental Researches on Inoculation applied to the study of these affections: With a therapeutical summary and special formulary. By PH. RICORD, M.D., Surgeon of the Venereal Hospital of Paris, Clinical Professor of Special Pathology. Translated from the French by A. SIDNEY DOANE, A.M., M.D. Thirteenth edition. One vol. 8vo. $1.50.

M. Ricord's reputation as a lecturer and practitioner in Paris is of the highest order. He is distinguished for his sound and philosophical views upon a disease which carries terror wherever it appears, and whose consequences are often felt by the innocent as well as the guilty. The first part of the book partakes of the philosophical spirit of its author, while in the pages devoted to the treatment of syphilis, M. Ricord has spread out the results of thousands of cases coming under his observation.

Warrington's Obstetrics. The Obstetric Catechism: containing three thousand two hundred and forty-seven questions and answers on obstetrics proper. By JOSEPH WARRINGTON, M.D. 150 illustrations. One vol. 12mo. $1.50.

An excellent compend of obstetric science and practice, in a very convenient form for purposes of instruction. The author is a very eminent professor, and the work was intended for the use of his own pupils, and students of medicine generally. The illustrations of the work are very numerous, and of the most useful kind tothe student.

Simpson's Obstetrics. The Obstetric Memoirs and Contributions of JAMES Y. SIMPSON, M.D., F.R.S, Professor of Midwifery in the University of Edinburgh, etc. etc. Edited by W. O. PRIESTLY, M.D., of Edinburgh, formerly Vice-President of the Parisian Medical Society; and HORATIO R. STORER, M.D., of Boston, U. S., one of the Physicians to the Boston Lying-in Hospital, Member of the Medico-Chirurgical and Obstetric Societies of Edinburgh, etc. Two vols. 8vo. Cloth, $6.00; sheep, $7.50.

The object of the editors has been to present these Memoirs to the medical profession in a form readily available, so as to facilitate the study of any special inquiry, an object of no slight importance to most medical men engaged in active practice. The papers have appeared at different times in journals some of which are out of print, were inaccessible to the medical public, although anxiously sought for. They are the result of an almost unlimited practical knowledge and experience, and do honor to the literature of the profession.

Mitchell's Essays. Five Essays. By John KEARSLEY MITCHELL, M.D., late Professor of the Practice of Medicine in Jefferson Medical College of Philadelphia, etc. etc. 1. Essay upon the cryptogamous origin of malarious and epidemic fevers. 2. An essay upon animal magnetism, or vital induction. 3. On the penetrativeness of fluids. 4. On the penetrativeness of gases. 5. On a new practice in acute and chronic rheumatism. Edited by S. WEIR MITCHELL, M.D. One vol. 12mo. $1.25.

The friends of the late Dr. Mitchell, which designation included all who knew him, and the members of the medical profession throughout the land, will welcome this volume as a tribute to his memory, and prize it for its intrinsic value—*North American.*

Reeves's Enteric Fever. A Practical Treatise on Enteric Fever. Being an analysis of 130 consecutive cases, derived from private practice, and embracing a partial history of the disease in Virginia. By JAMES E. REEVES, M.D. One vol. 12mo. $1.00.

Malgaigne's Treatise on Fractures. A Treatise on Fractures. By Professor J. F. MALGAIGNE, of Paris. With over one hundred Illustrations. Translated from the French, with notes and additions, by JOHN H. PACKARD, M.D. One vol. 8vo. $4.00.

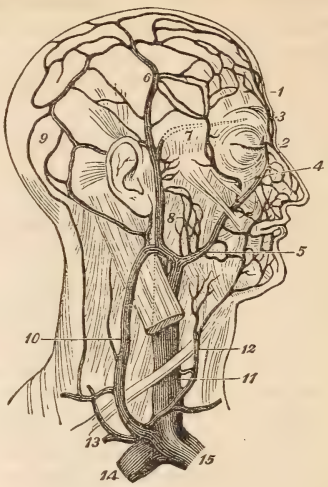
Old Inter-Capsular Fracture, with considerable shortening.

Malgaigne's Treatise has enjoyed so wide a circulation and such well-deserved renown, that we must own to a feeling of surprise at learning that before the appearance of the present work no attempt has been made to present so popular an author in an English dress. The present book, a contribution to our literature from America, is the work of a gentleman whose name is not otherwise known to us, and is one which we can conscientiously pronounce very valuable. . . A very useful book indeed, and one which we hope will have an extensive circulation.—*British and Foreign Med.-Chir. Review.*

Must be regarded as a monument, conspicuous and to be admired, even among the noble monuments of the medical literature of his [the author's] country. As a solid, complete, substantial, highly-finished work, we know of none that is its superior; it can, with justice, be regarded as a model in scientific literature.— *North American Med.-Chir. Review.*

It affords us sincere pleasure to be able to welcome the appearance, in an English dress, of this valuable treatise. The annotations which Dr. Packard has appended to it are numerous, and appear to us to be of much practical value, adapting, as they do, the treatment of fractures to the generally received and most approved American methods. —*Journal of the Medical Sciences.*

Richardson's Anatomy. Elements of Human Anatomy: General, Descriptive, and Practical. With over 400 illustrations. By T. G. RICHARDSON, M.D., Demonstrator of Anatomy in the Medical Department of the University of Louisville, and one of the attending Surgeons to the Louisville Marine Hospital. One vol. 8vo. $3.00.



Veins of the head and neck.

It is an amply sufficient text-book, and the preceptor may confidently place it in the hands of his pupils as such. The wood-cuts are numerous and elegant, and serve admirably to illustrate the text —*New Jersey Medical Reporter.*

Our author claims for his work the improvement of having general, descriptive, and practical anatomy in the same volume; the arrangement of the section devoted to practical anatomy so as to secure the greatest possible economy of material; and lastly, in the substitution of English for Latin terms, wherever it appeared to be practicable and judicious.—*N. Y. Medical Times.*

Wood's Lectures and Addresses. Intro- ductory Lectures and Addresses on Medical Subjects. Delivered chiefly before the medical classes of the University of Pennsylvania. By GEO. B. WOOD, M.D., LL.D., President of the American Philosophical Society, Professor of the Theory and Practice of Medicine, and of Clinical Medicine, in the University of Pennsylvania, etc. etc. One vol. 8vo. $1.75.

Wood's Practice of Medicine. A Treatise on the Practice of Medicine. By. GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania. Fourth edition, improved. Two vols. 8vo. $7.00.

This is far the best work on the practice of medicine in the English language, and we recommend it strongly to the attention of our readers. It is much fuller than Dr. Watson's admirable lectures, while it is less lengthy than the Library or Cyclopædia of Medicine; and it has this further advantage over the two last-named works—that while they are far behind, it is a fair reflex of the actual state of knowledge. —*London Medical Times and Gazette.*

Wood's Therapeutics. A Treatise on Therapeutics and Pharmacology, or Materia Medica. By GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, Senior Physician of the Pennsylvania Hospital, one of the authors of the United States Dispensatory, author of a Treatise on the Practice of Medicine, etc. etc. Two vols. 8vo. $7.00.

In his preface Dr. Wood gives the following account of his opportunities for acquiring knowledge and forming just views on the subjects embraced in this treatise:—

"Almost from the commencement of his professional life the author has given peculiar attention to this branch of medical knowledge. For a period of about thirty years, before 1850, when he was transferred to the professorship which he now occupies, he was engaged in teaching materia medica, first as a private lecturer, and afterwards successively in the Philadelphia College of Pharmacy and the University of Pennsylvania. His position, therefore, rendered constant investigations into the properties, effects, and uses of remedies necessary in order at once to do justice to his pupils and avoid discredit to himself. Most of those whom he now addresses are probably aware that he is one of the authors of the United States Dispensatory. To provide the original materials for his portion of that work, and to gather from time to time the knowledge requisite for its maintenance upon a level with the progressive condition of medical science, unremitting diligence was essential in prosecuting inquiry and investigation in the whole field of pharmacology. In addition to the ordinary professional opportunities, he has for about twenty years held the office of one of the physicians of the Pennsylvania Hospital, which has given him facilities for testing the value of remedies greater than any amount of private practice could afford. Few persons have had greater advantages or stronger inducements than himself for acquiring the knowledge requisite for the production of a work of this kind."

Wood and Bache's Dispensatory. The Dispensatory of the United States: consisting of

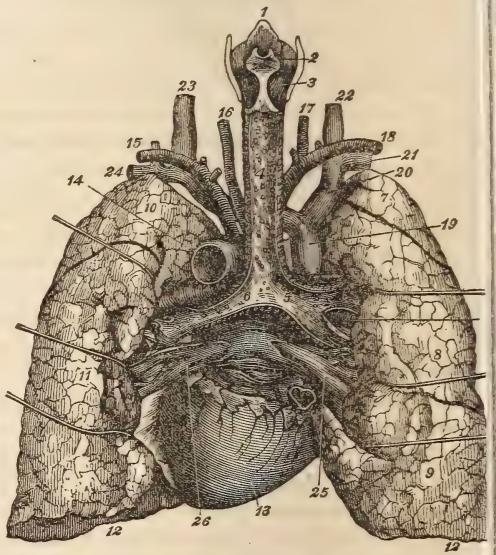
1. A treatise on Materia Medica, or the natural, commercial, chemical, and medical history of the substances employed in medicine, and recognized by the Pharmacopœias of the United States and Great Britain;

2. A treatise on Pharmacy: comprising an account of the preparations directed by the American and British Pharmacopœias, and designed especially to illustrate the Pharmacopœia of the United States; and

3. A copious Appendix: embracing an account of all substances not contained in the official catalogues, which are used in medicine, or have any interest for the physician or apothecary. By GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, etc. etc.; and FRANKLIN BACHE, M.D., Professor of Chemistry in the Jefferson Medical College of Philadelphia, etc. etc. Eleventh edition, much enlarged. One vol. 8vo. $6.00.

This work has been thoroughly revised, with many alterations and additions, so as to bring it fully up to the level of the present state of materia medica and pharmacy. It embraces the substance of the recently revised United States and British Pharmacopœias, with a commentary on all that is new in those publications. Nothing, indeed, has been omitted in the revision which could render it worthy of the confidence it has enjoyed.

Morton's Human Anatomy. An Illustrated System of Human Anatomy, Special, General, and Microscopic. By SAMUEL GEORGE MORTON, M.D., author of Crania Americana, Crania Ægyptiaca, etc. With three hundred and ninty-one engravings on wood. One vol. 8vo. $4.50.



Posterior View of the Lungs, from Bourgery.

Dr. Morton's reputation as a man of profound science, great ability, and untiring energy, has been recognized not only in America, but in Europe, for the last twenty years. His "Crania Americana" and "Crania Ægyptiaca" have given him a world-wide fame. His anatomy is one of his latest works, and in it he has availed himself of all the interesting and important discoveries in anatomy which have been recently made. The work is published in splendid style, and the engravings were all executed under the careful supervision of the author.

J. B. LIPPINCOTT & CO., Publishers,
22 and 24 North Fourth St., Philadelphia.

THE

MEDICAL AND SURGICAL REPORTER

Whole Series, No. 283. PHILADELPHIA, MARCH 22, 1862. New Series, Vol. VII. No. 25.

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

By Geo. K. Smith, M.D.,

Demonstrator of Anatomy in the Long Island College Hospital, Brooklyn, New York.

DISCUSSION UPON THE FOREGOING PAPER IN THE SURGICAL SECTION OF THE NEW YORK ACADEMY OF MEDICINE. DR. JAMES R. WOOD, CHAIRMAN.

Stated Meeting, November 22, 1861.

Dr. George K. Smith, of Brooklyn, having at a previous meeting read an elaborate and interesting paper on the "Relation of the insertion of the capsular ligament to intra-capsular fracture of the neck of the femur," opened by appointment the discussion upon it by reviewing the whole subject briefly as follows:—

In opening the discussion I propose to mention, briefly, some of the reasons why different surgeons, equally honest in their search for truth, and equally competent to judge of the points at issue, have hitherto been so much at variance in the investigation of this subject; and afterward read the summary of my paper.

The *first* of these reasons is, that different surgeons have located the posterior insertion of the capsular ligament at different points—some at the middle of the posterior surface of the neck, some as far remote as the shaft of the bone, and others at all points intermediate between these two extremes; so that a fracture, located three-fourths of an inch distant from the posterior inter-trochanteric line, would, in the opinion of one surgeon, be extra-capsular, while, in the opinion of another surgeon, it would be entirely included by the capsule. *Second*, surgeons have not seemed to be aware of the fact that the insertion of the capsular ligament is removed by the morbid changes which occur as a consequence of the fracture. This circumstance has given rise to the following difference of opinion. The surgeons who have made autopsies, after union of a fracture of the neck, have found the line of union included by the capsule of the specimen, even after the removal of the entire neck by absorption. In this circumstance they have found (as they supposed) positive evidence that the fracture, and its subsequent union, were intra-capsular. Having determined this point, they have macerated the specimen to prove that the bond of union was composed of bony material; and when, after maceration, the bone has been viewed by other surgeons, some, finding the line of union close to the shaft of the bone, believed it to be intra-capsular; while others, who found the line of union equally close to the head of the bone, interpreted its proximity to the head in favor of an extra-capsular fracture. Mr. Jones's case furnishes a fine illustration of this difference of opinion. Mr. Jones states that

"On dissection, the capsule was found very much thickened, and it was not until the shaft of the bone was divided that the knife could be passed around the joint, so contracted was the space between the trochanter major and the edge of the acetabulum. The direction of the fracture could not be traced, or the bond of union made out, until the bone had been macerated. As portions of the capsule became loose, they were removed by the forceps, which enabled me to discover, what I believe to be the case, that the fracture occurred entirely within the capsule."

After maceration the bone was presented to Sir Astley Cooper for inspection. He was of opinion that

"The fracture was in part within, and in part external to the capsular ligament; in part united,

and in part not, and the neck of the thigh-bone absorbed."

The following is Mr. Stanley's history of Jones's case:—

"The history of the case is clearly that of fracture of the neck of the femur; the appearances of the bone show that there has been a fracture which has reunited by an osseous medium, and the direction of the fracture is such as, in my opinion, can permit no doubt that it was confined to the portion of the neck of the bone covered by synovial membrane; consequently, that it was wholly within the capsule. The fracture extends through the basis of the head of the bone in the line of its junction with the neck. As in other cases of the same kind, a great part of the neck has disappeared, and in consequence the head is proportionately nearer to the trochanter major and shaft of the bone; *its reunion has*, in fact, taken place in part to the remaining portion of the neck, and in part to the shaft."

(Dr. Smith here exhibited a plate representing the posterior surface of the specimen, taken from the *Medico-Chirurgical Transactions.*)

For the conclusions to which I have arrived, see summary of the paper on page 540.

Professor Wood has suggested that I should give a brief review of the specimens of union within the capsule which have been reported.

Robert William Smith has reported seven cases of osseous union of this fracture. Four of these cases are not illustrated by the engravings of the specimens, and their histories have failed to assign a definite location to the line of union; therefore, if we admit in either case that the bone was fractured, we have no means of determining whether the line of union was within or without the normal capsule. The histories of three of these cases are also defective in other very important points. Mr. Stanley's case does not show conclusively that the bone was ever fractured, nor does the history state that the patient was treated for a fracture; on the contrary, Mr. Stanley's history of the case shows that most of the surgeons who saw the case believed that, instead of a fracture, there was "a dislocation into the foramen ovale;" also, that the patient was treated for a dislocation. "Extension was made with the pulleys, and the limb moved in different directions, to replace the head of the bone."

In the history of Mr. Swan's case, the only evidence that the neck of the bone was fractured is found in the opinion of Sir Astley Cooper, who, however, acknowledged his inability to detect crepitus, or any other symptoms of fracture, except pain on movement of the limb, and "a slight inclination of the toes outward."* In the history of Mr. Chorley's case, Mr. Smith admits that "a portion of the upper fragment extended in one situation a little external to the capsule;" an admission which at once excludes the specimen from the class under consideration. In each of the three remaining cases reported by Mr. Smith, the appearance of the specimen is represented by engravings, which show that the posterior surface of the neck has been mainly removed by absorption, and that the line of union on this surface is too close to the shaft of the bone to be included by any specimen of the normal capsule. Mr. Smith regards these cases as examples of impacted fracture, in which the fragments have been so locked together that "they have been maintained in contact and at rest;" and states that "it is only under such circumstances that we are to hope for the occurrence of bony consolidation."† The histories of these cases state that the neck has been absorbed, and the engravings show that nearly the whole of the neck has been removed; hence the impaction, which Mr. Smith considers so essential to bony union, must have been loosened by the subsequent absorption. Again, I cannot see how Mr. Smith is able to determine that the fracture was intra-capsular, after so great a portion of the neck has been removed. The line of union in each of these specimens is too near the shaft of the bone to be included by any specimen of the normal capsule I have seen, and I have taken accurate measurements of more than sixty.

Professor Mussey has reported three cases of bony union, in each of which the line of union is shown, both by the history of the case and the engraving of the specimen, to be close to the shaft of the bone; too close to be included by any specimen of the normal capsule. It is evident that he located the posterior insertion of the capsule close to the shaft of the bone, since it must of necessity be so in order to include the line of union in either of his specimens; moreover, he has reported, as illustrations of intra-capsular fracture, two cases of fibrous union in which the whole of the neck has been removed by absorption.

Dr. Smith next reviewed the cases reported by Professor March. He said that as Professor March was present, he hoped to hear something

* Cooper on Dislocations and Fractures of the Joints, p. 157.
† Smith on Fractures, p. 64.

interesting from him on the subject, and would be as brief as possible. He read the history of the first case, and remarked concerning the specimen, that the fracture and its subsequent union were probably within the normal capsule; that about half of the neck had been removed by absorption, and that the remaining half is attached to the shaft; also, that the head of the bone, which appears to be united to the posterior surface of the remaining fragment of the neck, is in reality separated from it by the capsular ligament, which was folded between the two fragments. He then exhibited the specimen, stating that if it were held between the eye and the gas-light, one could see through between the posterior surfaces of the neck and the head, proving that the fragments are not united in that situation, and that only the extremity of the neck is attached to that portion of the head overlapping it. He further stated, that some of the bond of union is composed of fibrous material, but could not say that it was all of that character. He, however, suggested the importance of macerating the specimen to settle that point. He then exhibited Professor March's second specimen, calling attention to the fact that the capsular ligament which has been preserved with the specimen is inserted so far remote that it includes nearly all of the trochanter minor; that the history does not afford conclusive proof that the neck was fractured, and that, if ever broken, the line of union is too near the shaft of the bone to be included by the normal capsule.

He next proceeded to give an account of a case reported by Dr. Holmes, of Canton, Pa. He said that the posterior surface of the neck of the specimen had lost about half of its length by absorption, and that the line of union, as given by Dr. Holmes, was too near the shaft of the bone to be included by any specimen of the normal capsule examined by him. He said that Dr. Holmes had informed him, by letter, that "the specimen had been boiled, and sufficiently tested to satisfy all those who have examined it, of the bony union," and further, that "the capsular ligament is entire on the bone." He thought that the specimen had not been sufficiently tested in this particular; for, if the bone had been boiled long enough to separate a fibrous union, the capsular ligament could not now remain attached to the specimen. He then read the history of Professor Parker's case, and said that there seemed to be no doubt that the bone had been fractured, for the attending surgeon noticed shortening of the limb, eversion of the toes, and detected crepitus on moving the limb. He said that the anterior surface of the neck retained about its normal length, while the posterior surface had been almost completely removed by absorption, and thought that the line of union on this surface could not be regarded as intra-capsular.

In regard to Professor Post's specimen, he regretted that no history of the case could be obtained. The external appearances of the neck were strongly indicative of fracture, with bony union; the sections of the bone, however, gave no evidence of fracture, the cancellated structure of the head and neck being perfect throughout. If the bone was fractured, the line of union was without doubt within the normal capsule.

Professor Alden March, of Albany, (who was present by invitation,) being requested to give his views upon the points before the meeting, remarked that, so far as the question related to the varying points of attachment of the capsule to the os femoris, Dr. Smith's simple and ingenious mode of measurement set the matter at rest. He believed that we should find a difference in the point of attachment at the posterior part of the neck of the bones in the normal and abnormal specimens. He agreed with Dr. Smith, that in all cases of *intra-capsular* fracture, the neck, whether more or less attached to the head or shaft of the bone, was almost or entirely absorbed before any effort at reunion took place, either by ligamentous or bony material. And, furthermore, that as absorption progressed, when it began to encroach upon the attachment of the capsule in its natural site, the attachment gradually receded or was carried outward, so as either to approach closely to or be transplanted into the posterior inter-trochanteric line. This view of the subject, he stated, was supported by the analogy which existed between the pathological conditions of the capsule in those cases, and in those of morbus coxarius. In the latter disease, as the destructive process goes on, the capsule will be carried back upon the face of the bone, to correspond with the enlargement of the acetabulum. He then exhibited several specimens of hip disease, with the capsular ligament thus abnormally attached, which fully illustrated the point referred to. Three specimens of his own, of intra-capsular fracture of the cervix femoris, were next exhibited; the first, to show the rapid absorption of the neck, without any effort at union; the

second, absorption of the entire neck and ligamentous union at a later period; and the third, to illustrate nearly the same amount of absorption as in the other cases, but with *bony union.* The first specimen of fracture was from a white-washer, who fell from a ladder and injured himself in the hip. He was taken to the almshouse, where he died in the course of a few weeks. Dr. March saw the case at the time of the accident, and called it a fracture of the neck of the femur. On making the post-mortem examination, he found, to his surprise, that the neck of the bone had completely disappeared, as if it had been cut out. There was, however, no ligamentous or other attachment of the head to the shaft of the bone.

The second specimen was recently obtained from an almshouse subject, who, in January, 1860, while engaged in sport with other inmates of the institution, was merely thrown upon the injured hip. The attending physician, Dr. Boulevare, (who reported the case to Dr. March,) diagnosticated the injury to be fracture within the capsular ligament. It was treated by placing the fractured limb upon a pillow, and confining the patient on his back for several weeks. In the course of a few months he could get about pretty comfortably by holding on to chairs, tables, etc. with his hands. On the 28th of August, 1861, nearly twenty months after he received the injury, he died from an attack of dysentery.

In the third specimen of intra-capsular fractures, (in which there appeared to be bony union,) there was more of the neck attached to the shaft at the anterior face of the bone than in either of the other specimens, though posteriorly the relation of the head and shaft appeared nearly the same. No history of this specimen could be obtained; it was purchased abroad some years since, with other pathological specimens, for the museum of the Albany Medical College.

A fourth specimen, which he claimed to be an intra-capsular fracture, was also shown. It occurred in a boy ten or twelve years of age, who, from the date of the accident, was always lame. He died at the advanced age of sixty-two years. The history of the case could not be procured, since the attending surgeon died some thirty or thirty-five years before the patient. The non-professional testimony was abundant, and strongly in favor of the nature of the accident assumed. In this case, the line of the fracture on the anterior face of the neck, and in fact on the posterior face, corresponded in a remarkable manner with the last specimen exhibited. The upper part of the thigh-bone of the same subject, from the opposite side, was exhibited, and found to be nearly in a normal condition, with the exception of a slight change in the form of the head of the bone, which must have taken place at an advanced period of life, from chronic arthritic inflammation.

He next exhibited several specimens of extra-capsular fracture of the neck and trochanter, some of which were beautiful examples of that variety called impacted fracture. But one specimen seemed to be peculiar in these particulars—there was little or no distention; no *shortening*, no *inversion*, and but the slightest amount of *eversion;* without doubt, no crepitus could have been detected at the time of the accident, and hence a direct diagnosis would have been almost impossible. He remarked that it was curious to observe that in those specimens (and he thought it would be found true in all other extra-capsular fractures, whether impacted or not) there was no absorption or shortening of the neck. Whereas there was great shortening, and in most instances almost entire absorption of the neck of the bone, when the fracture was within the capsule; while the contrary was the case when the fracture was without the capsule. This being the case, would not the post-mortem condition of the part furnish complete and satisfactory evidence of the nature and situation of the fracture during life?

Dr. March suggested to all present to apply the test of injecting plaster of Paris in all those cases of *suspected intra-capsular* fractures where death occurred at a period remote from the receipt of the injury, that we might ascertain as conclusively in the pathological, as Dr. Smith had done in the anatomical specimen, the precise extent of the attachment of the capsule on the posterior face of the neck of the bone. He also suggested, as a subject worthy of study, and needing explanation, why it is that the bony material of the neck of the femur was so freely and so rapidly absorbed in intra-capsular fracture—and by what means it was accomplished, while the same effect does not follow in other fractures.

Assuming as he did, that in most cases of intra-capsular fracture of the neck of the femur the fracture took place near or close to the head of the bone, and that *all* of the neck on that portion connected with the shaft was absorbed; and that the capsule *recedes* as the destructive pro-

cess goes on, so as to be found in due time attached posteriorly near, or upon the posterior inter-trochanteric line, as has been shown in the specimens exhibited by Dr. Smith, he believed that one of the difficulties in deciding whether a certain fracture was entirely within the capsule was satisfactorily removed. This discussion was calculated to bring two points prominently before the medical public, viz., the *rapid absorption* of the neck of the bone in intra-capsular fractures, and the abnormal connection of the posterior portion of the coxo-femoral capsule.

The specimen of Dr. Holmes, to which Dr. Smith had referred, was submitted to the examination of the Medical Society of the State of New York, at its session of 1860. Dr. March was of opinion that it was a genuine case of complete intra-capsular fracture, with bony union. But as some of the members of the society seemed to doubt the correctness of this opinion, a committee, consisting of Dr. Brinsmade, of Troy, Dr. Parker, of Poughkeepsie, and the speaker, was appointed, to whom the subject was referred for a critical and thorough examination, both by maceration and the microscope. But the committee never obtained possession of the bone, and reported accordingly at the session of 1861, with the request (suggested by Dr. Holmes) that it be continued, which was done. But up to this time, the committee have neither received the specimen nor heard from its possessor.

The doctor, in conclusion, took occasion to say something about morbus coxarius. He presented several specimens of necrosis of the head of the bone detached from the neck; one from the living subject, from whom it worked out spontaneously, and the patient recovered; and another which had been found in a post-mortem specimen. In a third specimen, about one-third of the head of the bone was found dead, but not entirely cast off. A fourth specimen was exhibited, in which an exfoliation of the head of the bone, somewhat larger than the thumb-nail, was cast off, and extracted through an incision made into the joint at an early period of the disease. This patient also recovered. These specimens, he thought, would go to prove the correctness of his views presented to the medical public in a published paper of the *Transactions of the American Medical Association* for the year 1853, on the Pathology of Hip Diseases, and the mechanical means suggested to prevent progressive absorption. They will, he said, especially help to prove the efficacy of the treatment of my friend, Dr. Sayre, who not only uses extension and counter-extension to relieve the inflamed and tender parts from pressure, but advocates cutting freely into the hip-joint, under certain circumstances. If nature feels the necessity and adopts the means, painful and tedious though they be, to separate the dead head from the shaft of the bone, Dr. Sayre can do it much more speedily and effectually with his knife. The effort, he said, that was made a few years ago, to bring into disrepute the mechanical treatment of hip disease, (as suggested by himself,) and to recommend exercise, and motion of the joint in all stages of the disease, and to rely upon constitutional remedies, seems about as preposterous as would be the treatment of a broken leg without any dressings or means of support, and directing that the individual thus affected should move about and take free out-door exercise.

Stated Meeting, December, 27, 1861.

Dr. A. C. Post remarked as follows:—

"I appreciate highly the laborious and scientific investigations, the results of which Dr. Smith has presented to the Section. I believe that they will lead to important modifications of the views which have been entertained by surgeons with reference to the important class of injuries to which they relate. But I am not prepared, without further demonstration, to assent to all the conclusions at which he has arrived. I have no objection to make to either of the first four propositions, as stated by Dr. Smith. The fifth proposition seems to me to be founded on an error, or at least on a statement which has not been demonstrated to be a fact. The statement to which I allude is this, viz., that when the cervix femoris has been fractured, and the fragments have reunited, and the cervix is found on post-mortem examination to be shorter than that of the opposite side, the absorption, to which this shortening is due, preceded the union of the fragments. It appears to me more probable that the union, in such cases, takes place in the first instance, and that the intersititial absorption is a subsequent event. This view would seem to be supported by the fact that before union has taken place the fragment connected with the head of the bone has a very imperfect supply of the veins or lymphatics, through whose agency the absorption would be likely to occur.

"In order to demonstrate the truth of Dr. Smith's proposition it would be necessary to present a series of preparations taken from patients who had survived intra-capsular fractures for variable but known periods antecedent to union, and to show that there was a progressive

shortening of the neck before the occurrence of union. Dr. Smith's sixth proposition seems to me to involve errors, or at least unsustained hypotheses, more glaring than that which is objected to in the fifth proposition. The language which is employed by Dr. Smith, in the sixth proposition, seems to convey the idea that the main obstacle to bony union, in intra-capsular fracture, is to be found in the condition of the fragment connected with the shaft of the bone; and that when the portion of the neck between the fracture and the shaft has been absorbed, the obstacle to bony union is thus removed. Now, I conceive the principal obstacles to bony union in intra-capsular fractures to be found in the condition of the fragment connected with the head, which, having no supply of blood-vessels, except those which are conveyed to it by the ligamentum teres, does not receive sufficient nourishment to secure its union by bone with the other fragment. The seventh proposition seems to be founded on the same errors or unsustained hypotheses which are contained in the fifth and sixth. The first sentence in this proposition requires to be qualified by confining the statement to intra-capsular fractures, as it has not been demonstrated that there is ordinarily any shortening of the cervix femoris following extra-capsular fractures. The eighth proposition is founded on the same error or unsustained hypothesis as the three preceding ones, viz., that the shortening of the neck by absorption precedes the union of the fragments by bony or fibrous tissue. From the similarity in the appearances of certain cases of fractured cervix in which union has taken place, and in which a large portion of the cervix has been absorbed, to certain cases of disease in which shortening has occurred without fracture, it might be inferred that probably the union of the fragments has preceded the absorption of the cervix.

"The principal interest which attaches to Dr. Smith's report appears to me to be the demonstration that there is a considerable diversity in the extent of the portion of the cervix femoris which is included within the capsule in different subjects; and that the portions included within the capsules are equal on the two sides of the same subject. He has also demonstrated that there is a considerable portion of the cervix intervening between the insertion of the capsule and the inter-trochanteric lines. From these facts which have thus been demonstrated, it may fairly be inferred that it will ordinarily be impossible to determine, during life, whether or not fracture is entirely within the capsule. And in old cases where absorption has taken place, and the capsule has shifted its position, it may be impossible, even by a post-mortem examination, to determine positively whether the fracture was originally within the capsule.

"I propose, therefore, to make a new classification of fractures of the cervix femoris, dividing them into two classes, viz., fractures between the caput femoris and the inter-trochanteric lines, and fractures at the inter-trochanteric lines extending more or less into the shaft of the bone. I propose to call the fractures of the first class *intra-cervical;* and those of the second class, *extra-cervical.* I think that these two classes of fractures will be found to correspond very nearly with those which have hitherto been described as intra-capsular and extra-capsular. They are somewhat distinct in the signs by which they are characterized during life, and are strikingly dissimilar in their appearances, as disclosed by examination after death. I submit the following propositions:—

"1st. Intra-cervical fractures are usually included within the capsular ligament, being near the head of the bone, and often involving a portion of it.

"2d. Intra-cervical fractures are attended with a shortening of the limb, which, in recent cases, rarely, if ever, exceeds an inch.

"3d. In intra-cervical fractures bony union very rarely occurs. When bony union fails, there is sometimes ligamentous union, and sometimes the fragments remain entirely detached from each other.

"4th. In intra-cervical fractures, whether bony union takes place or not, the cervix femoris becomes greatly shortened by interstitial absorption, and, after the lapse of several weeks or months, the limb may be shortened to the extent of two inches or more.

"5th. In intra-cervical fractures, as the neck of the bone is shortened by absorption, the capsule shifts its position, so that in some cases it ultimately becomes attached to the shaft of the bone.

"6th. In extra-cervical fractures, the cervix femoris is driven into the spongy structure at the junction of the trochanters with the shaft of the bone; and if the fracture be the result of a moderate amount of force, the upper fragment will be impacted into the lower. The shortening in such cases varies, according to Robert W. Smith, from a quarter of an inch to an inch and a half.

"7th. When an extra-cervical fracture is produced by a greater amount of force, the impaction is relieved by the splitting off of the trochanters, and the fragments acquire a considerable degree of mobility. In such cases, the shortening varies from one inch to two and a half inches.

"8th. In extra-cervical fractures, bony union may generally be expected, if the patient be not infirm, or of very advanced age. The union of the trochanters with the shaft of the bone takes place at an earlier period than the union of the neck with the shaft. An exuberant growth of bony matter is apt to take place at the junction of the trochanter with the shaft of the bone.

"9th. There is not usually any remarkable shortening of the cervix femoris after extra-cervical fractures."

The Society then, on motion, adjourned.

To be Continued.

Operations upon the Lips and Cheek.

By James E. Garretson, M.D.,
Of Philadelphia.

Diseases of the Mouth—*Continued.*

Hare-lip.—This defect consists in a break, single or double, in the continuity of the lip. The deficiency is almost precisely similar to that which exists naturally in the hare and rabbit, and from which, likewise, the imperfection gets its name. When congenital, it is always found associated with the superior lip.

A general view of the operation for the relief of hare-lip, and indeed the view which comprises or embraces the principles of the cure, is, that the cleft or break is to be pared, brought together, and held in apposition until nature shall secure a union. There are, however, nice surgico-mechanical associations, which are to be studied in connection with such principles of operation. Cutting manipulations upon the face, and especially about the lips, claim, it seems to me, more than ordinary skill and judgment. And such skill and judgment the surgeon should be prepared to give, if not for humanity's sake, at least for his own credit and reputation; for, as truly remarked by Mr. Skey, "on the more or less perfect result of such operations depends the appearance and expression of the patient for life." And surely as the surgeon shall beautify or mar, is the comfort of the patient, as well as his own reputation, influenced.

A proper and comprehensive study of hare-lip divides itself, naturally, into three subjects of special signification:—

1st. The time of life best suited to the operation.

2d. The condition of the patient.

3d. The mode of operating.

"I advise you," says Mr. Liston, "to defer the operation till the first set of teeth come in, and I have seen good reasons for adhering to such rule; when the operation is undertaken at an early period, there is often great difficulty—sometimes union does not take place, the parts turn out again, and the patient is rendered more deformed than in the first instance. When the features are enlarged somewhat, you have more ground to work upon, you can put the parts then neatly together, and you can almost answer positively for the union taking place. I operated," continues this gentleman, "on a child, the other day, in whom the operation had been performed twelve months ago. The parents were anxious to have it performed, but I then refused; it was done, however, but the moment the pins were removed, the lip turned out as before."

"For my own part," says Mr. Barnsby Cooper, "I entirely agree with Sir Astley Cooper, in regarding it as unsafe to operate on infants before weaning: firstly, because, from their excessive irritability, they are totally unable to sustain any loss of blood; and, secondly, because, after the operation, they are rendered incapable of sucking; and, indeed, Sir Astley has pointed out, in his lectures, the frequency of the failures he met with in his own practice, in operating upon infants shortly after birth. I consider the best time, under ordinary circumstances, to be soon after the child is weaned, as it is then capable of receiving nourishment independently of its mother, and has overcome the distress incidental to the separation from her."

Dr. Houston, of London, in examining the question as to the period of life best fitted for the performance of the operation, decides in favor of the third month after birth; urging, as his reasons, that the parts recover themselves better than when the operation is done later in life; that the lip, in due time, acquires fullness and pliancy; the nose is prevented from assuming a spread-out, ugly appearance; the fissure in the palate, if there be any, closes greatly with the growth, if supported by a firm and perfect lip; bad habits of speaking, such as guttural or nasal utterance, which, if once established, become irremediable, are avoided; and, by removing such disfiguration before the child is conscious of its existence, it is spared the feelings of humiliation which the consciousness of such infirmity necessarily imparts, and which invariably gives a tone to the character of the individual. He states that he has operated on several infants of three months old, with equal success in all cases, and has never failed.

Dupuytren recommends the third month. Velpeau the first six, but if that be already passed, he defers operating until the tenth or fifteenth year.

Skey, differing from Velpeau, says "the operation may be performed at almost any age, but should not be undertaken under about six months."

"The period of life," says Mr. Fergusson, "which I think very eligible for these operations, is, either before the teeth begin to show through the gums, or shortly after the child has ceased to suck, provided the health seems good. If the patient is allowed to grow up, he is usually unmanageable until after the age of puberty; but, if possible, the malformation should always be put right before this time, as there is a better

chance of the gum and nose assuming a good shape than after they have arrived at their full development. Indeed," continues Mr. Fergusson, "there are so many advantages besides these—as to speaking, appearance, etc.—that it is wonderful why any surgeon can recommend delay in such cases after the first or second year of life. I have myself," says Mr. Fergusson, "operated frequently within the first three months, and in some of these instances seen the child take the breast readily, with the pins still in the lip."

Dr. J. Mason Warren has operated on infants only a few days old, with perfect success. Prof. P. Dubois read before the Academy of Medicine of Paris a paper on this subject, and referred to seven instances which had come under his notice, where the proceedings had been resorted to, and successfully, within the first few days after birth; and Malgaigne has followed a similar practice.

"From all my experience and reflections, deduces Mr. Fergusson, "I am more than ever disposed to recommend a very early operation. Within the last twelve months I have operated on five infants, all of them under three months, with the most satisfactory results; and these cases, with others I have previously had, are sufficient to induce me to pursue a similar practice in all instances of the kind which may come under my notice, unless there be some apparent indication not to interfere. An erroneous impression, as I suppose, prevails that children are remarkably subject to convulsions while undergoing operations; and this is often urged as a reason for not interfering with hare-lip in early life. Doubtless convulsions have occurred in some of these cases, but similar effects have been produced in the adult, and by less formidable means, too. Sir Astley Cooper has referred to several examples of this kind, but I imagine they must be rare indeed. I once asked Dr. Abercrombie, of Edinburgh, the result of his experience on this point, and he could not bring a single instance to his recollection where convulsions could be fairly attributed to an operation."

What period, says Colles, the famous Dublin professor, should one undertake the operation for hare-lip? No doubt the earlier you perform it the better chance you will have of a speedy cure; but infants at a very early age do not bear operations well—many of them will be seized with convulsions, and die, if subjected to a more trifling operation than this we have been considering. I think between the second and third year the best period.

There are, says Professor Gross, in his System of Surgery, few subjects in surgery which have been more frequently discussed during the last quarter of a century than the question of the period at which the operation of hare-lip may be best performed. My own opinion long has been that the most eligible period is from the third to the sixth month, or a short time before the appearance of the first teeth; the operation is then usually borne well, there is no danger of convulsions; and the adhesive process generally proceeds most kindly. In very simple cases I do not hesitate to attempt it earlier, and on the other hand, in double or very complicated hare-lip, I almost always postpone it until the child has attained its second or third year.

Dr. D. H. Agnew operates at any period. Is only influenced, even during the process of dentition, by constitutional condition. If dentition is progressing quietly, that is, if there is no associated irritability, the doctor says he can see no reason why the operation may not be done just as well at this time as any other; has operated in all the stages of this process. Dr. A. prefers, however, early operations; thinks that his most successful cases have been on children who had not attained their tenth day. So far as interference with sucking is concerned, he remarks that he has seen a child take the breast almost immediately after an operation has been completed.

Prof. Pancoast entertains about the same views as expressed by Dr. Agnew. Dr. Pancoast gives it as the result of his very extended experience, that the operation may be about as well done one time as another. Does not see why the period of dentition is to be so cautiously avoided. Operates at any period of this process, if there are no contraindications in the way of constitutional disturbance. Has operated on many children as early as a few days after birth, with the happiest results. Does not find the operation interfere materially with nursing.

Prof. Henry H. Smith, of the University, says:—

"As respects the period for the operation, the earliest possible time after the tissues seem firm is to be selected, usually after the third month of infancy."

Now, although we have here embraced such a variety of opinions, which, to the inexperienced, may seem confusing enough, yet, when we consider the different circumstances under which these equally learned and experienced gentlemen have written and spoken, we are enabled to deduce from such experiences rules for guidance, in which, if my experience at all serves me, will be found data as reliable as we could well expect to possess. The views of such as I

have mentioned will be found to represent fairly the diversity of opinion existing throughout the profession generally. I especially selected these well-known authorities only because, being public teachers and writers, their views in extenso are thereby made the more easy to come at by any reader specially interested in this subject.

And first, in making up the sum of an operation we are to consider, regardless of the age of the patient, the amount of shock such operation is to give, and the ability of the patient to bear this shock. This at once brings up the character of the defect and the amount of operative proceeding necessary to its cure. A bad double cleft would inflict a much greater amount of pain than a simple single one, consequently would inflict a shock double or treble in force to the last. Now, every man, woman, and child in the world has just so much physique and no more. The experience and physiological knowledge of the surgeon enables him to weigh the life force. He must then decide, imprimis, whether or not his patient is equal in physical force to the demands of the operation.

He must consider the condition of his patient. This brings up the second of the special propositions or stand-points from which the operation is to be studied. The possession of a capable physique does not imply that the life force has not, like the tide, its ebb and flow. A child may have proper development, yet in the very hour in which it is presented for operation it may labor under temporary depression, the result of functional disturbances. A child, for example, just convalescent from cholera infantum, or just through with some of the exanthemata, would certainly not be as fit a subject for operation as though it had not suffered; it may have borne the demands made upon it very well, and come out of the ordeal looking strong; but then it is the last feather that bends the camel; the system that endured bravely the one demand may not have a balance of force on hand that will just at that time meet another. Give such a system time; get it back to the same condition in which the first demand found it, and you then have it certainly capable of the same resistance, and of the same endurance. Again, a patient may not be up to the required tone, and yet circumstances render a speedy operation desirable. We can assist nature. Exercise, fresh air, and proper food can do much. The last may imply that the milk of the mother, if the child be nursing, be exchanged for that of the hired nurse. Who has not examined the milk of a mother or wet-nurse, and found it greatly deficient in some important constituent? I have seen babes growing visibly weaker and more puny day by day; I have seen physicians baffled because they could find no one portion of the economy sicker than another. I have seen the microscopist take the milk on which such a babe has been feeding, and looking at it through his object glasses, found it half made up by cholesterin. A change of milk has effected immediate change in the child.

A child may have fibrinous blood to excess, and which tends to undue inflammatory action, or the lymph which such blood would exude might be so corpuscular in character that a wound would at once take on suppurative action. Either condition would be equally adverse to an operation. Yet we have antiphlogistics for the one and tonics for the other. A seemingly strong child may be in a typhoid state, and a blushing cheek may be but the effect of hectic or excitement; typhoid blood has, comparatively, no fibrin. If you were to do an operation on such a patient you would be sure to have a failure for your pains. I have at this very moment under my care a patient in just such a typhoid state, yet the pulse is bounding and the face is always flushed when I see him; the quick pulse is the result of the very deficiency in the blood, and the flush in his face comes, he tells me, always with my ring of his door bell, and goes with my going. A child may be cutting its teeth, yet this does not necessarily contraindicate an operation. It is not every child that gets convulsions and kindred troubles with the getting of its teeth; many a child goes through the whole process of dentition without cause upon which to ground a sob. If a child is brought to the surgeon, cutting teeth, with an operation for hare-lip to be performed, and there is associated with the dentition no general or special local disturbance, why should he not proceed, *cæteris paribus*, to at once do the operation? I can see, and I have up to this time met with no objections to so doing.

The next consideration is the operation itself. The modifications on the one principal operation, and the variety of cleft influencing such modifications.

A basis operation might best be represented by a simple V-cleft, having the very mesian line of the lip as its center — the indication being to restore such a lip to a normal contour. If we look

into our glass, we find that the normal lip has no break in its continuity; we find what may be termed the center of the lip represented at the free margin by a projection of more or less graceful curve. We find extending from this free margin up to the nares, and bounded laterally by the alæ nasæ a fossa—the fossa labialis. From this fossa we find the lip on either side spreading itself out to be lost in the cheek. To meet the indications of this case we must remove the break in the continuity, create a mesial projection, and give to the center a fossa. To fulfill such indications requires a study of the conditions from an artistico-surgical stand-point. We want, first, to remove the cleft. This in itself is easy of accomplishment; we have only to pare the edges and sew, or pin, the raw surfaces together. But in viewing this first step a little closer, we perceive that a common V-paring from the edges of the V-break would defeat our purpose in securing either a center fossa or a mesial projection; the mode of bringing the parts together would put on the stretch such fibers of the orbicularis as are associated with the margin of the lip, while all that portion farther up would be comparatively relaxed; thus our fossa would be a promontory, and our soft median swell would be a stretched mucous membrane. Such an operation would, then, in meeting the first indication, destroy our ability to fulfill the two others. We must, then, instead of the V cut seek a better; for in the way in which we pare our edges lies the fulfillment of all three of the indications. An ellipse suggests itself, and such a paring will meet our wants. 1st. It enables us to bring the edges of the cleft together. 2d. The center of the ellipse is its greatest diameter, and this center is the center of the lip. When we bring together this most widely separated part, it necessarily projects the most yielding surface—and such surface is the free symphysis of the lip; thus the second indication is met. 3d. The greatest stretch on the muscle is in the site of the myrtiform fossa, with a necessary relaxation above and below; and thus the last indication is met; for, as the result of such a condition of the parts, we have a fossa formed and a promontory at the free mesial line.

Remarks. — The paring of a cleft should always be constant in the one feature of being V shaped, as reference is had to the base of the V looking toward the throat; this allows for the excess in the retraction of the skin over the mucous membrane. If this precaution is neglected a difficulty is likely to be experienced in the gaping of the cutaneous portion of the wound.

The subject of retaining the parts in apposition as regard is had to suture material, has elicited much controversy. The ordinary operation is as follows: After you have pared the edges of the cleft, take up a needle threaded with the ordinary waxed silk, pass this through the free margins of the lip and bring the parts together—this is to insure a satisfactory approximation at this point. Next take two ordinary steel pins and pass them at equidistant points on the lip—they must go in depth at least half its thickness; these pins are to enter and emerge at least five lines on either side of the fissure. Silk ligature stuff in the shape of the figure of 8 is now to be passed about and around these pins. Adhesive strips are next passed over the pins, a slit being made for their accommodation, from cheek to cheek; the object of these strips is to press tissue toward the wound, in this way preventing tension. If blood oozes out and clots upon the ligatures, it has been considered rather favorable than otherwise, as it has been thought to add to the support of the parts. After two or three days the pins are carefully removed by a rotatory motion; the ligature material and adhesive strips are allowed to remain from four days to a week longer.

The ordinary hare-lip pin is objectionable; it is too large. The figure of 8 ligature in connection with the pin is equally to be condemned. Wherever we see a case of hare-lip that has been operated on, we see four ugly scars on either side of the cleft: these are the points at which the pins entered and emerged, and upon which the figure of 8 ligature made its greatest compression; the parts ulcerated, and the scars are simply the cicatrices from the healing of such ulcers.

Various means have been suggested to be employed in lieu of such a dressing. Dr. Agnew, in a conversation I had with him lately on the subject, tells me he now uses silver wire altogether. He simply sews the parts together with a greater or less number of interrupted sutures. He thinks such sutures possess great advantages over the pins.

Another means of bringing the parts together that has been suggested, is the employment of the interrupted suture of silk from the under surface of the lip. In one case where I tried this method the result was very unsatisfactory.

Dr. Washington Atlee has suggested a suture

which differs only from the ordinary pin and figure of 8 in that he employs rings of india-rubber, which are stretched over the pins. This suture for many purposes must prove an admirable addition to the armamentarium chirurgicum, but in hare-lip operations it has no advantage that I can see over the ordinary figure of 8, inasmuch as the same strain, if not a greater, is exerted over the surface at which the rubber is supported by the pins. The merit claimed for this suture is, that whether a part swells or remains normal, the compressing force continues about the same.

A mode of securing the apposition of the parts, which I think will be found very satisfactory, is to take three, four, or more pieces of silver wire, the fewer you can get along with the better, the gauge being the most delicate that can be procured; pass these and let them emerge at lines which shall very nearly correspond with the commissure of the lips. Next take a strip of common sheet-lead, and, cutting it to an appropriate size, make in it as many little holes as you have threads of silk to either side; pass the threads through these holes and compress on each a McLean button—*i.e.* a simple flat shot. Now, with the fingers, nicely approximate the wound. This satisfactorily accomplished, draw up the wires and fix them on a second piece of sheet-lead, as in the first instance. If the center, which is the point of the wound, tends to bulge forward, a delicate compress is to be placed over it and bound to its place by a vertico-labial sling. The advantages of this dressing are, that it may be retained weeks, if necessary. It is entirely unirritating. The wound is perfectly open to examination, and, more than all this, the threads being unirritating and so very slight, when taken away leave no scars.

A still happier dressing, but one which can only be applied on such patients as have reached the age of intelligence, is a modification of Dewar. Dewar's compressor may be likened to the ordinary double hernia truss. It consists simply of a spring which passes around the head, having small pads at either extremity. The piece is of such circle and character as to bring the pads to the labial commissures. The instrument is held in position by any convenient means. Dewar holds it by what might be termed a fronto-sagito-lambdoidal sling. The process of dressing with this instrument would be as follows: After making the paring of the cleft, cleanse the parts well with cold water, (controlling hemorrhage by pressure on the facial arteries;) next take a strand of the common silk ligature material and nicely approximate the free edges of the lip, passing the needle on the under side. The next step is the application of the compressor. With the thumb and finger force the tissue of the cheeks toward the mesial line of the lip—this approximates perfectly the edges of the wound; replace your fingers by the compressor, and the parts are held *in situ*. If the approximation of the wound thus made should not, however, be satisfactory, certain little secondary compresses of linen may be placed more immediately about the wound and fixed by a delicate roller. The advantages of this dressing will be at once apparent. There are no pins or ligatures used, consequently there is nothing to interfere with very direct union; there are no punctures made in the skin; of course there is no risk of having any but the single linear scar, and even this, if direct union is secured, must be very slight indeed. The parts can be examined at any and all times without any important interference with the apparatus.

In some individuals the coronary arteries are quite large. To suppress the hemorrhage from these arteries dependence is generally placed on the pressure exerted in bringing together the edges of the wound. If such pressure does not answer, or if you should prefer some dressing that will not make this pressure, light ligatures may be thrown around the vessels, one end to be cut off, the other to be brought out on the back part of the wound. Ligatures, however, are to be avoided when possible, as they interfere with proper union.

A much better means than the resort to the ligature is compression of the facial arteries. Such compression needs to be kept up but for a short time, as the smaller artery soon contracts. Dewar's compressor controls the hemorrhage by its pressure on the coronary arteries, and such compression may be very readily imitated with the common compress and roller.

There is a feature associated most importantly with the formation of the linear cicatrix, and the unsightly notch which so commonly deforms hare-lip patients, that I do not remember to have ever seen alluded to, but which is of such consequence as to merit the closest scrutiny. Is it the fault of nature or the fault of the surgeon that the operation gives any cicatrix at all? Cicatricial

tissue—tissue inodulaire, as Delpech more happily terms it—means accidental tissue—new tissue formed from granulations. The existence of inodular tissues implies, as it is more or less in amount, that a wound has healed either by primary or secondary adhesion, and certainly not by what Mr. Hunter terms union by first intention, or Mr. Paget calls immediate union. If a wound is made to unite by first intention, there cannot possibly be any inodular tissue or scar, because no new tissue has been formed, blood-vessels and nerves have been brought into perfect contact, and the harmony of the parts has been so completely restored that after a few weeks the closest observation fails to discover the seat of accident. We have familiar examples of such union in the slight cuts we are constantly giving ourselves with the razor, the cuts we get about the fingers, etc. Some three months back I removed from the parotid region of a young man a tumor quite the size of a hen's egg. The flaps were adjusted with the greatest care and held in place by compresses of old and fine linen. I saw this gentleman about two weeks since, and so immediate had been the union that it was impossible to say where the cut had been made. Mr. Paget mentions very large wounds that not unfrequently heal in this perfect manner. One case, that of a lady who had been operated on for scirrhus of the mammary gland, might be specially alluded to. Speaking of the operation, he says:—

"The flaps, which were very large, had been carefully laid down, strapped with isinglass plaster, and well tended. After death, which occurred in three weeks, from erysipelas and phlebitis, I cut off the edges of the wound with the subjacent parts, expecting to find the evidences of union by organized lymph or, possibly, blood, but neither existed; and the state of the parts cannot be better described than by saying that scarcely the least indication remained of either the place where the flap of skin was laid on the fascia, or the means by which they were united. It was not possible to distinguish the relation which these parts held to each other from that which naturally exists between subcutaneous fat and the fat beneath it. There was no unnatural adhesion; but the subcutaneous fat which did lie over the mammary gland was now connected with the fascia over the pectoral muscle. The parts were altered in their relations, but not in their structure. I could find," continues Mr. Paget, "small points of induration where, I suspect, ligatures had been tied, or where possibly some slight inflammation had been otherwise excited; and one small abscess existed under the lower flap. But with the most careful microscopic examination, I could discover no lymph or exudation corpuscles, and only a small quantity of what looked like the debris of such oil particles or corpuscles of blood as might have been between the cut surfaces when the flaps were laid down. In short," says Mr. Paget, "this was union by first intention; it was immediate, at once in respect of the absence of any intermediate substance placed between the wounded surfaces, and in respect of the speed with which it was accomplished."

The union of a wound by adhesion, or by granulation, implies a certain amount of inflammatory action, and the exudation of, and organization of, lymph. This is the way in which hare-lip wounds are healed, and this is why we have the linear cicatrix; and not only the cicatrix, but, according as the union has simulated or departed from the immediate type, have we a great or small notch.

But how is the notch formed? The explanation is simple enough; but it is not the explanation generally given; at least, I think not. The notch is the result of the natural contraction which belongs to fibrous tissue, of which fibrous tissue the cicatrix is formed; and if we observe, we will find that where this linear inodular tissue abounds in excess, there we will always find associated a big notch. If we need further proof to convince ourselves that such contraction is the cause of the notch, we have only to remark that in cases of large cicatrices there has occurred invariably the destruction of the symmetry of all the surrounding parts; the contraction has puckered, as it were, the whole lip. When the linear cicatrix is very limited, the notch is correspondingly small, and these conditions could not so uniformly exist associated, if it was the manner of the paring exclusively that gave the notch, and not the contraction as I have described.

The nearer then the approach to a union by first intention we can make in hare-lip, the better for our success will be the result. But can we not get immediate union in full? This would imply that we have artery to artery, vein to vein, nerve to nerve. Well, the artery is a prominent point of reference, and the relations of surrounding parts are in perfect unison. If we can get the mouths of the two arteries together, will not all other vessels assume, by compulsion, inoculation? We may try for this at any rate; such care will necessarily insure to us the very nicest approximation of parts, and if immediate union cannot

be gotten, we may at least secure to our patient by such care the smallest possible scar.

To return now to the modifications in hare-lip, and the operations.

The first modification on the simple cleft described is where the break is to the one side or the other, being bounded in either instance by the mesial line. This character of cleft, particularly as the left side is concerned, is by far the most common type; indeed, it may be denominated the type proper of hare-lip. In operating here, it is readily seen that the simple ellipse, as practiced in the previous case, will not answer. Such a cut would give the labial swell and fossa to the one or the other side of the mesian line, according as the break extended right or left.

In these cases the indications are met by the operations of Malgaigne. This surgeon makes the one side of a simple V-cut on the external flap, while he practices the semiellipse on the mesial flap. This, it is seen, brings up the outside flap, and projects the apex of the mesial one. A modification on this operation, and a decided improvement, I think, is one suggested by Dr. Richard Levis. This consists in making a kind of double V-cut on the mesial flap. The knife is entered just below the nostril, and the first incision takes the line of the one side of the V. On nearing the free surface, however, this direction is changed, and a second V is cut out of the substance of the flap. This mode of operating secures a very nice labial swell, and will be found sufficiently easy of performance. To bring out to the level the notch thus made, implies some force; and if it should be designed to use Dewar's compressor, it must always be associated with a point of silver suture; the suture being introduced from the mucous surface.

Another, and the next most common variety in hare-lip, is that in which the break is double—that is, the single break is divided into two parts by a teat which starts out from the apex of the cleft; this teat is seldom more than half the width of the lip. For the correction of this defect, various means are resorted to. Some surgeons cut out the teat, thus converting the double into a single break, making the basis cleft as described. Others, on the contrary, after paring all the four sides, tease and strain the center piece or teat until they get it on a level with the rest of the lip. Both of these operations are very objectionable. The first takes away an unnecessary amount of substance from the lip, thus giving a tense, stretched appearance to the part; while the natural resiliency which belongs to most tissue insures, from the second manipulation, a character of notch or central depression almost as unsightly as the original deformity. In this simple form of double hare-lip, I think it will be found the most satisfactory operation to pare the lateral flaps in the elliptical form as described, while the center teat should be pared into the V-form, the base being to the septum narium. All the parts will thus be found capable of a neat approximation; the teat doing its share more or less in filling up the break. The approximation is to be made as in the mode described.

A second form of double hare-lip is that in which the alveolar process is associated with the teat. This is termed complicated hare-lip. The portion of process projecting into the cleft is generally an intermaxillary formation, and holds the germs or developed incisor teeth—generally the centrals alone. The correction of this defect implies a somewhat formidable operation. The first step consists in separating well the lip from its reflection over the process. Next the gum is separated thoroughly from the projecting bone, which bone, the third step in the operation removes down to the natural curvature of the parts, either by means of saw, chisel, or cutting forceps. For myself, I prefer the chisel; it is certainly a much more convenient instrument than the Hay's saw so commonly employed. A straight and curved chisel should always be at hand. If in this third step of the operation the anterior palatine artery is wounded, the resulting hemorrhage is easily controlled, either by taking up the vessel, by touching it with one of the Monsel's solutions of iron; or, if neither of these means suffice for its accomplishment, the artery may be touched with a red-hot cauterant needle, or it may be plugged with a point of pine stick. The bone removed, the flaps of gum may be laid back in the cavity, where they will remain sufficiently approximated without the employment of any sutures. The operation upon the lip may now be done at once in the manner described; or, if the force of the patient is too much exhausted, it may be left for a future period.

These are the two principal forms of double hare-lip. An appreciation of the operations required for their cure will enable the surgeon to meet satisfactorily any modifications that may present on either of them; and these modifications, it is to be suggested, are constantly occur-

ring. Let us for a single moment refer to an uncomplicated double hare-lip, where the center piece or teat, as I have called it, might be found so large and square as fairly to divide the lip into three parts. Now, here the mesian line of the lip would be formed by the center piece; it would, therefore, I think, suggest itself to any one that either side of the cleft was to be treated as a separate hare-lip—that is, the whole manipulation might be done at the one sitting; but there would have to be symmetrical parings made of either cleft. In such a case, we have also to take into the account the concavity made on either of the sides of our fissure, as reference is had to the influence exerted on the free margin of the lip; for here, of course, we require no swell. Whether, again, in these really double cases, we would first operate on the one side, and when this was cured, on the other, is such a matter as should properly be left to the judgment of the operator. Many surgeons prefer to correct the whole deformity at once. If we should do this, the operation would only deviate from the principles laid down, as regard would be had to approximating the parts. If the center piece might be small, I think it would be found the most satisfactory practice to pass the pins, wire, or whatever suture material might be used, directly from one lateral flap, on through the center piece, to and through the other, thus uniting all the parts together by a common suture. If, on the contrary, a center piece is broad and well covered by skin, I think that the greatest good would be found to be secured by using two sets of ligatures. As regards the single or double operation, I myself should be influenced by the width of the middle piece, the tenseness or laxity of the tissue of the lip, and the endurance and condition of the patient.

Another modification of the double hare-lip is one in which there is a projection into the cleft of the incisor teeth, the alveolar process itself being sufficiently normal to allow of non-interference with it. This modification is met with commonly alone in the adult, or at least after second dentition. The projection of the teeth is the natural result of the lack of external support from the labial deficiency; the tongue has actually pushed them outwardly. This explanation will, I am sure, only seem strange to such as are unacquainted with the exceeding mobility of the dental organs under slight but continued force. It is certainly the true cause of such projection. In a case of this kind, a preliminary operation is the removal of the teeth. If, now, six months are allowed to intervene before attempting the operation on the lip, the alveoli of the extracted teeth will be found to have receded, through absorption, quite the eighth of an inch. The second operation is then to be done *secundem artem*. This waiting on the process of absorption will be found greatly to conduce to a successful result.

A still better though more tedious mode of correcting such a deformity is by first bringing the projecting teeth back to their normal place in the arch, through the agency of elastic ligatures. This is a perfectly feasible operation, and not at all difficult of performance. By such a preliminary procedure we not only get the teeth out of the way, but we save to the patient these valuable organs. To make and apply such a ligature, we have only to take a slip of common India-rubber and attach at its either end loops of silk. We next take these loops and place them over certain of the molar teeth; it is entirely immaterial which. The center or rubber part is next stretched forward and laid over the labial faces of the teeth to be pulled back. It is astonishing how quickly and powerfully such a force will act upon the teeth. In two or three weeks, at most, the teeth may be brought into their proper line. To secure them in situ, and prevent their being again pushed forward, we have only to keep them ligatured in any convenient manner until the operation on the lip is made.

Cleft of the lip, as previously remarked, is common to almost every case of cleft of the hard palate. It has always been deemed very important, in these cases, that an operation on the lip should be done as early as possible; it was and is thought to favor the union of the bony cleft. In these cases the operation differs from that suited to any ordinary case only when there is projection of one or both alveolar prominences into the break. In these cases, if the projection is very marked—that is, so much so as to prevent the bringing together of the lips over them—we may, perhaps, be able to do nothing better than cut the parts away. This, however, is always to be avoided where possible—firstly, because we thus destroy the germs of the teeth; and secondly, because, if by any means we can get union of the lip, the parts in their development will come mutually to accommodate each other. In such cases it is recommended, by some authors, that

we endeavor to bend back these juttings of bone, turning them in toward the mesial line. Where this can be done, it answers a very admirable purpose. Still another mode—after the method which I suggested for the complete relief of this character of cleft—is found in the employment of the fronto-occipito labialis elastic sling. This sling is so applied that it pulls upon the projecting process backward from the occiput. It will certainly fulfill the indications, but its employment is not unattended with trouble.

Cases of double hare-lip not unfrequently occur where the center slip is so associated with the septum of the nares as to make the parts seem as one. If there was not the loss of material from the lip, the septum would bear being described as in a state of hypertrophy. Again, the lost part from the lip is sometimes found attached to the very tip of the nose, giving to the patient the appearance of laboring under lipoma. These, together with all the anomalies in this direction, are first to be studied, as regards their cure, from the artistic stand-point. The surgeon knows where and what he can afford to cut—he knows what nature will do in the case; it remains, therefore, as is plainly seen, for him only to consider well his incisions—where he shall make them, and what is to be the result—before the operation is attempted. *Chirurgus viribus suis fietus est.*

A useful study is found in the examination of examples. If we familiarize ourselves with all kinds of cases, and if, what is still better, we represent the morbid anatomy in India-rubber, and thus devise and try experimental operations, we shall, I am sure, find the subject of hare-lip grow simple enough.

Excellent studies will be found pictured on the following pages: Liston & Mütter's Surgery, page 187; Erichsen's Surgery, page 690; Gross's Surgery, pages 611, 612, 617, vol. ii.; Fergusson's Surgery, page 494; Smith's Surgery, page 163.

Addenda.—In operating for hare-lip, always first dissect the lip well off from its attachment to the gum.

In paring the fissures, the young surgeon is much more apt to remove too little than too much.

In paring out the apex of the cleft, be sure and freshen perfectly the extreme point of such apex. This is oftentimes neglected, and an ugly pucker is the result.

The paring for hare-lip is, perhaps, best made on a wooden spatula.

Few instruments are really required in this operation. A scalpel and forceps, together with such ligature material as it is designed to employ, will answer the purpose well enough.

The best mode of operating on the infant is for the surgeon to seat himself face to face with an assistant. The child being etherized, the surgeon lays its body over his own knees, the head being supported by the assistant. Upon the incision being made on one side, the assistant grasps the lip between the thumb and finger, compressing the coronary artery. When the artery of the opposite side is cut, he secures this. Both are steadily held until the operator is ready to coaptate the wound.

In operating on the adult, I think it will be found the most convenient plan to stand behind the patient; such a chair being used, and the head being placed in such position, as recommended in the operation of staphyloraphy.

Another very convenient manner is to sit in front of the patient, the head being supported by the breast of an assistant.

When plaster is used to assist the ligatures, silk gauze and collodion are to be preferred; this leaves the wound constantly exposed to inspection, and is a light and most effective dressing.

To be continued.

Medical Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Reported by William B. Atkinson, M.D., Recording Secretary.

November 13th, 1861.

VARIOLA, ITS MODIFICATIONS AND TREATMENT.

Dr. Condie did not rise for the purpose of controverting any of the statements made by the lecturer of the evening in reference to the varieties and treatment of small-pox. It was difficult indeed to offer any comment upon the instructive outline which had been laid before us, as it failed to present us with any salient points for either a favorable or unfavorable criticism. While he admitted the entire correspondence of the remarks of Dr. Bell with the results of his own clinical observations, Dr. Condie believed that it would be scarcely necessary to attempt, from the materials thence derived, a more full development of either of the points hastily glanced at by the lecturer.

In respect to the different forms or varieties of variola, Dr. Condie was convinced that they had been multiplied by writers on the disease to an

unnecessary extent. In a practical point of view, little was to be gained by any other distinction than that which was based upon the extent and discreteness of the eruption—the absence or presence of petechiæ, or other serious affection of the skin, the character of the fever, and the dynamic condition of the general organism by which the disease is accompanied.

In respect to treatment, notwithstanding much good may be effected by appropriate medication commenced at the very onset of the disease, and in anticipation of the eruption, yet it must be borne in mind that every attempt directed to procure an abortion of small-pox, to arrest it in any of its stages, will fail. The adoption of proper therapeutic measures previously to the appearance of the eruption may have the effect of reducing the violence and diminishing the danger of the attack, but can neither prevent it from occurring nor from running its specific course.

For small-pox there is no specific treatment. Every case of the disease, as it occurs, must be treated upon general principles, according to the indications presented. Mild cases, occurring in patients who are temperate in their habits and of a good constitution, a purely expectant treatment is all that is in general demanded. In more violent cases, and in those which happen in patients of bad habits and impaired constitutions, the utmost watchfulness, with a prompt and decided course of treatment, will be demanded, and will often be crowned with success.

There is, perhaps, no disease in the treatment of which greater attention is required in respect to the regimen of the patient. Without pure, fresh air, a proper temperature, the strictest cleanliness, with a suitable diet and appropriate drinks, all other remedial measures, however well adapted to the case and judiciously and faithfully administered, will fail to exhibit any curative efficacy.

Since the time of Sydenham, what has been termed the cooling treatment has been very generally recognized as the one best adapted to small-pox. Dr. Condie, however, feared that the "cooling treatment" has in some instances been carried too far, and, in consequence, has been productive of harm rather than benefit. Attendant upon many cases of the disease there is a manifest tendency to a sinking of the vital powers of the patient, which tendency cannot fail to be increased by such a cooling regimen as Dr. Condie had seen put in practice during the present epidemic—the patient being kept in a cold room, with a draught of air upon him, from open windows, night and day, and allowed to partake freely of iced water or lemonade. Some even carry "the cold regime" so far as to subject the surface of the patient's body to sponging with cold water. If there be any tendency present to adynamia, such a treatment must necessarily tend to confirm it. Dr. Condie would not be understood, however, as countenancing a heating treatment in the cases of small-pox as they ordinarily occur. While he deprecated an excessive cooling regimen, he would at the same time insist that there occur but few cases of the disease in which a well-ventilated apartment of moderate temperature, but free from draughts, is not essential to the safety and comfort of the patient; and equally as few in which he should not be allowed the free use of any simple cool fluid as a drink.

In respect to the propriety of depletion or of stimulation in the management of small-pox, this must be decided by the circumstances of each separate case—the general character of the prevailing epidemic being always, however, taken into consideration. In very few cases during the present prevalence of small-pox had Dr. Condie found it necessary to resort to an active antiphlogistic treatment. In the majority of cases which fell under his care, the treatment pursued was such as would be demanded in the ordinary form of typhoid fever. In general, a tonic and moderately stimulating treatment was indicated throughout the attack. In the more severe cases, diffusible stimulants were demanded to sustain the patient while the disease ran its course, and until the revival of appetite and a renewal of the powers of the stomach furnished the opportunity for a resort to tonics and a nourishing diet, by which alone we can reasonably hope to restore permanent strength to the patient.

In very nearly all the more severe cases, accompanied by a profuse eruption, Dr. Condie had found that, during the stage of maturation, a full nourishing diet, whenever it could be taken, with a liberal use of alcoholic stimulants, was essential to sustain the vital forces. Rich broths, oysters, stewed or broiled chicken, tenderloin steak, and such like articles he has known to be taken and relished, and believes that he has just cause for ascribing to their use the preservation of his patients' lives in numerous instances.

In regard to external remedies—cups, leeches, blisters, rubefacients, etc. do not enter into the materia medica of small-pox; warm bathing, fomentations, and perhaps certain unguents may often be found decidedly beneficial. With Dr. Bell, Dr. Condie believed that the warm bath was adapted, as a remedial agent of some considerable efficacy, to a much more extended application in the treatment of small-pox than had been generally made of it, in this country at least.

There is little doubt that deformity from pitting in cases of small-pox may very generally be prevented by the abortive action of tincture of iodine directly to the postules. Much may also be done, in this respect, by keeping the face constantly covered by a thick layer of perfectly fresh lard, or indeed any mild, unirritating unguent. If these unctions be confined to the face, Dr. Condie could not see any very strong objection to their use; but it should be kept in mind that, if they be applied to too large a portion of the body, they will most certainly concur with the eruption in arresting the important functions, and in this manner augment the tendency already induced by the disease to a depression of the vital powers.

Two interesting points in connection with the subject of small-pox had not been touched upon by Dr. Bell; upon each of these Dr. Condie proposed to make a few brief remarks.

One of the points referred to relates to the all-important question, why is it that, while in so large a proportion of cases vaccination affords to its subject entire and permanent immunity from the contagion of small-pox, in others, who were reputed to have been placed fully under its protection, no such immunity is observed?

In a very large number of cases, Dr. Condie remarked, the failure of the prophylactic power of vaccination can be traced to the very careless manner in which it is performed in too many instances by the physicians themselves, or to the occurrence of some accidental cause by which the regular progress of the vaccine vesicle is interfered with, and its power to infect the system of the patient impaired. In such cases the patients have in fact never been vaccinated, and it is not at all surprising that they should contract small-pox when exposed to its contagion. Besides, however, these instances of entire or partial failure in vaccination, many others occur, especially during the prevalence of variolous epidemics, in which individuals are attacked with small-pox who had been vaccinated with genuine and efficient virus, and in whom the disease, at the place of its insertion, had apparently run regularly through its several stages, exhibiting all its proper pathognomonic characters, and leaving upon the arm, after the detachment of the scab, a well-defined, characteristic cicatrix. In these cases the attack of small-pox will often exhibit not the slightest modification in its characters, duration, or violence, from what it does when the disease occurs in such as have never been subjected to vaccination. By a careful examination of the results of the revaccinations that have been practiced, year after year, in the armies of Prussia, Bavaria, and other European powers, compared with those instituted among the pupils of our public schools, by a committee of the College of Physicians of this city, of which Dr. Condie was a member, he had convinced himself that the instances last referred to, of the failure of vaccination as a permanent protective against the contagion of small-pox, are due to an idiosyncrasy of constitution possessed by certain individuals—an idiosyncrasy which prevents the vaccine infection from bringing about that constitutional change, in whatever it may consist, by which the system is protected, subsequently, and for the remainder of his or her life, from the action of the variolous contagion. In some of those in whom the existence of the idiosyncrasy is manifested, no prophylactic influence whatever is evinced by what may with propriety be termed a successful vaccination; in others, the prophylaxis is only partial or of temporary continuance, so that, either immediately, or in the course of several months, or even years, the patient becomes again, to a greater or less extent, liable to an attack of small-pox when exposed to its contagion.

When the record of the numerous revaccinations that have heretofore been performed is carefully analyzed, it will be found, Dr. Condie was convinced, that the idiosyncrasy alluded to is enjoyed by about thirty-three per cent. of all who have been vaccinated. So strongly pronounced is this idiosyncrasy in some subjects, that, after repeated revaccinations, the susceptibility to small-pox infection will remain undiminished, or, at the furthest, only slightly impaired.

Admitting the fact here stated, and Dr. Condie did not perceive how it could be controverted, we argue the vast importance of the revaccination of entire families, neighborhoods, and communities, in every instance when small-pox breaks out in their midst—not simply for the purpose of testing the genuineness of the preceding vaccination, but to overcome, if it be possible, by repeated efforts, the resistance which certain constitutions present to the full prophylactic influence of the vaccine infection. It would be well, Dr. Condie remarked, if some pains were taken to impress upon the public mind the foregoing facts. Were they generally realized, the confidence of the community in vaccination would be increased by being assured that, in the trifling and perfectly safe operation of revaccination, performed before actual infection, they have at command an almost infallible security against an attack of small-pox, however much they may be brought in contact with its contagion.

As another interesting point connected with the history of small-pox, Dr. Condie instanced the influence exercised upon the child in utero by the disease when it attacks the mother during pregnancy. Does the gestation continue to the full period? Is the child equally subjected to the disease with the mother? These questions have been answered differently by different authorities, each confessedly basing his conclusion upon the result of his own observations. An attack of small-pox, like that of any other severe disease in the pregnant female, will no doubt often produce abortion, but not necessarily or invariably. In no instance observed by Dr. Condie, during the present epidemic, in which small-pox occurred during gestation, was the period of the latter in the slightest degree interfered with.

By some of the European writers it has been asserted that the infection of small-pox is never transmitted from the mother to the infant, excepting by its being brought directly into contact with the variolous contagion while it is passing into the world or immediately afterward.

During the present epidemic Dr. Condie had witnessed five cases in which small-pox attacked during pregnancy. In all of these cases delivery at the regular period took place during the stage of maturation. In one case the infant was born free from disease, and being immediately removed to a healthy house and neighborhood, escaped infection. When Dr. Condie last saw it, it was two months old, and perfectly healthy. In all the other children the variolous eruption made its appearance within from one to five days after

birth. They all terminated fatally—one on the third, two on the fifth, one on the sixth day of the eruption. It is evident, from these four cases, that the disease must have been acquired by the children in utero, though at different periods subsequent to that at which it was contracted by the mother.

Dr. Condie remarked, in conclusion, that his experience did not coincide with that of Dr. Coates in respect to the areola formed on the arm of the vaccinated. He had never had cause to be satisfied with the genuineness of the vaccination when the areola on the arm was irregular in shape, or presented a ragged edge. He was convinced that the more nearly the areola approached in all respects to the delineation of it originally furnished by Jenner, the more certain could we be of the genuineness and efficiency of the vaccination.

Dr. Jewell remarked that some years ago he attended a woman with small-pox who was in the eighth month of her pregnancy. On the eighth day of the eruption, the secondary fever assuming a violent character, premature labor came on, and she was delivered of a living child covered with small-pox pustules approaching their completion. In this case the mother perished, but her infected offspring survived.

While on the floor he would take the opportunity of saying a few words upon two points bearing upon the subject before the Society, to which neither the lecturer nor those who had followed him had made any allusion. He referred to the protracted character and the location of the epidemic small-pox now prevailing in our city.

He felt disappointed, and he was sure there were others like himself who had come here to learn something concerning the character and treatment of the present epidemic. The well-known ability of the lecturer for careful observation, and his enlarged experience in the disease during a former as well as in the present epidemic, from his opportunities as physician to the small-pox hospital, led him to indulge in this belief.

Dr. Jewell attributed the prevalence and propagation and long continuance of this loathsome disease in our city in a great degree to the neglect of public vaccination. It was well understood that for several years previous to July, 1860, (a few months only anterior to the appearance of the epidemic,) public vaccination was almost entirely neglected, and hence thousands in our city were ready subjects for the disease. The new ordinance for public vaccination, under direction of the Board of Health, went into operation in July, 1860, yet notwithstanding there has been a vigilant administration of the system, (over 10,000 cases having been returned as successfully vaccinated within a year,) it has failed to secure the object contemplated. It is a fact, not only well known, but greatly lamented, that very many in our community refuse, either through indifference or prejudice, to have their children vaccinated. Some more stringent legal enactment of the legislature, requiring every child born or brought into the city to be vaccinated, with the imposition of a penalty for neglecting or refusing, must be procured before this inestimable prophylactic will become a complete security against the prevalence of small-pox as an epidemic.

He was of opinion, also, that the unwillingness of many physicians to comply with the health law, requiring them to report all cases of pestilential or contagious disease coming under their notice to the Board of Health, was among the existing causes for the long continuance and spread of the disease. If all cases, with their location as they occurred, had been reported to the Board of Health, he had no doubt that the disease could have been mitigated and perhaps arrested through the sanitary measures that would have been instituted in those neighborhoods where there was an accumulation of existing causes for the nourishment and spread of the epidemic.

Another point to which he would call the attention of the Society was the location of the disease, or, in other words, those localities of our city where it had prevailed to the most alarming extent, and where it had not only made its appearance at the onset of the epidemic, but where it had in a very large degree confined its ravages.

The mortality from small-pox, in 1860, was only 57. Of this number 43 occurred in the three last months, to wit: 11 in October, 13 in November, and 19 in December. From this period we date the commencement of the epidemic. Sixteen of these deaths were in the 17th Ward, while five were in the 1st, and six in the 4th Ward.

The whole number of deaths from small-pox during the nine months of the present year, from January to September inclusive, have been 641. Of these 474, or 73 per cent., occurred in those sections of the city where the population and tenement houses are crowded; where there are numerous courts and confined alleys, harboring wretched and depraved occupants, and where there exists to a considerable extent bad ventilation and a great demand for sanitary improvements. One of these sections embraces the first five wards, bordering upon the Delaware, including old Southwark and Moyamensing. Here there were 221 of the above deaths, or 34·47 per cent. of the whole; while the other section, including the 16th, 17th, 18th, 19th, and 20th Wards, furnished 253, or 39·46 per cent. of the deaths. On the other hand, in the ten wards intervening between the 5th and 16th, embracing a populous portion of our city, yet better ventilated, better accommodations for room, and containing a better class of inhabitants—with numerous sanitary advantages—there were only 88 deaths, or 14 per cent.

Thus we have ten wards, above enumerated, in the very center of the city, containing a population of 223,745, returning only 14 per cent. of

the deaths from small-pox; while the other ten wards, five south and five north of and adjoining this central district, with a population of no more than 261,955, furnished 73 per cent. of the mortality.

The only and perhaps true inference to be drawn from these mortuary statistics of small-pox is, that the epidemic has spent its force and chosen its victims from those wards of our city where the laboring classes of the population are crowded together; where narrow streets and blind courts with closely-built and unventilated houses abound; where dampness and filth in-doors, and badly-drained and muddy streets prevail; and where a sad want of sanitary conveniences renders the neighborhoods prejudicial to health, and becoming active causes for the prevalence of disease.

Dr. Jewell was of the opinion that the small-pox, which had now been prevailing over a year in the city, was on the decline.

To be continued.

EDITORIAL DEPARTMENT.

REVIEWS AND BOOK NOTICES.

Commentaries on the Surgery of War in Portugal, Spain, France, and the Netherlands, from the battle of Roliça, in 1808, *to that of Waterloo, in* 1815; *with additions relating to those in the Crimea, in* 1854–1855. Showing the improvements made during and since that period in the great art and science of surgery on all the subjects to which they relate. Revised to October, 1855. By G. J. Guthrie, F.R.S. Sixth edition. Philadelphia: J. B. Lippincott & Co., 1862.

The name of the author of this work is more widely known in connection with the literature of military surgery than that of any other individual. His recorded observations, dating from 1808 to 1855, and his lectures during thirty years as Military Professor, entitle him to high consideration as an authority. The passage of the work rapidly through to a sixth edition is also evidence of the high appreciation of his teachings.

This reprint appears opportunely, and will be eagerly sought for by medical men who are now in the field giving their services for the relief of the sick and wounded in the struggle for the preservation of our nationality. To them its practical instruction should be considered indispensable. The most of our volunteer surgeons have, on the emergency, taken the field without experience in, or even a theoretical knowledge of the duties and responsibilities of the military surgeon. Our national characteristic of aptness for new duties will soon fit them for their positions, and the alacrity with which our publishers have supplied us with the best literature of military surgery will facilitate the acquisition.

All who are now in the field should possess Guthrie's Commentaries on the Surgery of War, as it is the most complete record of military surgery in existence.

In the present interest in such literature, and the dearth of all other medical publishing, this work will be extensively sought after, and the profession are greatly indebted to Messrs. Lippincott & Co. for the publishing and reprinting of this and other valuable works on the subject.

Clinical Lectures on the Diseases of Women and Children. By Gunning S. Bedford, A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics in the University of New York, etc. William Wood, Publisher, 389 Broadway, New York. Seventh edition, carefully revised. Price $3.25.

This work has already been favorably noticed in our pages upon its first appearance in the medical world. The publication of a seventh edition gives us occasion to reiterate the opinion of its merits we then expressed. Dr. Bedford has struck the right vein, and the rapid sale of his previous editions, together with the fact that it has received the high compliment, seldom accorded to any American work by our Transatlantic medical brethren, of a translation into French and German, is conclusive evidence of its authority as a standard work, and of a just appreciation of its merits. It is a practical work exactly adapted to the pressing wants of the practitioner, full of vivacity and life and interest from beginning to end. Its colloquial style may be at times slightly tedious and verbose, but this is amply compensated for in the clearness, certainty, and accuracy with which the diagnosis is reached, and the therapeutical principles applied in the treatment. Then, again, as with all the older practitioners of medicine, the author clings with great tenacity to certain articles of the materia medica in his treatment, which gives his practice the appearance of "routine;" but he demonstrates the utility of his own prescriptions in the successful results of his treatment. Then, again, we observe the author ignores the standard authority—the United States Dispensatory—in the nomenclature of his remedies, which, in a teacher of medicine of the present age, savors quite too much of antiquarianism. The teacher should not only be himself posted up to the day in which he lives, as we have no doubt our author is, but he should also tolerate no deficiency in this regard in his pupils. This feature of the work before us mars its beauty and symmetry. It is like a spot on a splendid painting. In a new edition we hope to see this defect remedied.

The work is neatly printed and bound, and we take pleasure in commending it to all practitioners who desire a practical work on the diseases of women and children.

On Bandaging and other Operations of Minor Surgery. By F. W. Sargent, M.D., Member of the College of Physicians of Philadelphia; one of the Surgeons to Wills' Hospital, etc. New edition, with an additional chapter on Military Surgery, by W. F. Atlee, M.D., and One Hundred and Eighty-seven Illustrations. Philadelphia: Blanchard & Lea, 1862.

The reputation this work has already acquired among practical surgeons will no doubt insure for the present edition a cordial reception. It has already become a text-book in some of our schools, and is worthy of commendation for its minute research, clear and complete rules of practice, and its many and excellent illustrations, which make it an invaluable hand-book in minor surgery. The treatise on military surgery renders the work more complete and more particularly suited to the profession at the present time. An appendix contains a list of formulæ which may prove of great practical value in answering the indications for which they are directed.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, MARCH 22, 1862.

HINDRANCES TO THE STUDY OF ANATOMY.

We confess to some surprise at the action of the Guardians of the Poor of this city relative to "the safe keeping of the bodies of those dying at the Almshouse." A vault has been erected, it seems, and a superintendent has been recommended to take charge of it, and "the bodies are to be kept in the vault until decomposition has begun, so that they cannot subsequently be used by the medical profession." The plea upon which this action is based and upon which its necessity is argued is, we suppose, that of humanity; that the pauper is entitled to as much consideration, by way of protection from the dissecting knife, as the man who is favored with a more honored burial. There is some plausibility in the argument, we admit, and were it true that no regard is paid to the wishes or feelings of friends or relatives in the matter, that all paupers who die at the Almshouse are indiscriminately dissected, there would be stronger semblance of reason for the action of the Board in attempting to deprive the medical profession of a fruitful and important means of studying disease. But such is not the fact. While post-mortem examinations are sought, friends are consulted, if any are at hand, and their wishes regarded, and it is only those who have no friends whose bodies are more freely placed upon the dissecting table. With that humanity which has always characterized the profession, no feelings of sorrowing friends are outraged, nor is a post mortem ever made without permission first asked and granted. In times past a strong prejudice existed against these examinations. It was violating the sanctity of the dead. It was inflicting pain upon friends, already borne down with weighty griefs, it was said. And so strong was this feeling that an autopsy was rare; and the obstacles thus thrown in the way of those who were earnestly seeking to benefit their fellow-men, by the study of disease, may have led the more ardent and zealous in the profession to seek by stealth what public prejudice denied them, and to disturb the quiet of the grave-yard to accomplish their end.

But this prejudice among the people has died away to a great extent. By common consent, criminals from the scaffold, and paupers without friends to care for or to bury them, have been turned over to the medical profession as their particular bequest; more rational and enlightened views have prevailed relative to post-mortem examinations, and Charon's occupation, as *resurrectionist*, is gone. The importance of these examinations is now recognized, and the beneficial results which flow from them to the living are appreciated.

Hence we confess our surprise at the action of the Board as above quoted, and the more so because the Almshouse is a public institution. The physicians and surgeons who are in attendance from day to day upon the hospital, where disease in its most loathsome and revolting forms is often found, receive no pecuniary compensation for their toil or time. It is freely given for the benefit of suffering humanity, and the only return they get for their labors is the privilege of dissection, and by this becoming more serviceable to the living.

Moreover, the Board, with commendable liberality, have erected a new and commodious clinic room, the best in the city, in construction and convenience, and have offered to all students who choose to avail themselves of it, the privilege, gratuitously, of clinical lectures and of visiting the wards of the hospital. Their liberality was most largely appreciated during the college sessions just passed, as the attendance upon the clinics abundantly attested, and students left the city fully impressed with the superior advantages of the Philadelphia Hospital for clinical instruction.

The action of the Board, therefore, in thus attempting to defeat the ends of medical science by depriving the student and practitioner of an indispensable means by which a knowledge of diagnosis and therapeutics is to be gained and verified, strikes us as most singularly inconsistent. It places them in the anomalous position of having provided some of the appliances of instruction, and withheld the most important. As well might they lock the doors of the anatomical museum now gathering there, or of the large and valuable library which they are now fitting up for the examination of visitors, or shut out the attending physicians from the hospital wards, and require them to prescribe for the patients without seeing them, or to understand medical science without a book or a morbid specimen. And the one would be quite as consistent as the other.

But we would not judge the Board harshly. The reason for their action, inconsistent as it appears with their former liberality in other matters, may not be apparent to us. Some improprieties, or indelicacies, or indiscretions, may have been the proper basis of *some* action in the premises. It cannot be their intention to cut off entirely a source from whence the medical schools of the city are supplied with material for dissection.

Their action can hardly be other than a temporary bending to popular clamor, which will soon lose its potency by exhausting its wind.

If, however, it be said that the Board are carrying into operation the law of the State, which is stringent against the exhumation of bodies for purposes of dissection, we can appreciate their law-abiding spirit, and honor them for its exhibition; but, at the same time, we would suggest that the law is intended as a protection to those who are actually buried, to secure the new-made grave from desecration, and is in nowise broken or annulled by the transfer of the body of any unclaimed pauper or criminal to the dissecting-table before it is honored with the rites of burial. Nay, more, the action of the Board, fully enforced, will destroy the very intent of the law, and re enact the horrors of the infamous resurrectionist. If, however, this view of the Board be correct, and their action is only in accordance with the law of the State, it becomes an important matter to appeal to the Legislature for a dissecting law, authorizing the bodies of criminals and of paupers who have no friends to claim them for burial to be transferred to the medical schools and profession. Medicine and surgery will be studied. The spirit of investigation into the nature of disease, and the principles and practice of surgery, is aroused, and will be prosecuted. No hindrance should be interposed to stay its progress. The interests of humanity demand here the utmost liberty consistent with sound discretion. We trust, therefore, the Board will carefully re-examine their action with a view to determine whether it be not unnecessarily stringent, and whether a due regard to the welfare of humanity and the interests of our city, which is, and must continue to be, the great center of medical instruction, do not require a modification, if not a repeal, of the rule they have adopted.

EDITORIAL NOTES AND COMMENTS.

University of Pennsylvania, Medical Department.—The annual commencement of this institution took place on Thursday of last week, at the Musical Fund Hall, which was densely packed at an early hour. A large proportion of the audience were ladies. The Germania Orchestra was in attendance, and discoursed some excellent music. A procession, consisting of the Trustees of the University, Faculty, Graduates, and invited guests, was formed at the college and marched to the Hall, where all, save the graduates, took seats upon the platform. The exercises were opened with prayer by Rev. Dr. Schaeffer. The degree of Doctoris in Medicinæ was then conferred in terse Latin phraseology upon the following gentlemen, by Rev. Daniel R. Goodwin, D.D., Provost of the University:—

John Aiken, Pa.; W. D. Bailey, Pa.; John Barber, Pa.; D. H. Bartine, Pa.; Daniel T. Batdorf, Pa.; Thomas T. Beveridge, N. B.; John J. Black, Del.; William R. D. Blackwood, Pa.; C. H. Boardman, Pa.; Lucius S. Bolles, R. I.; S. P. Boyer, Pa.; Geo. F. Brendle, Pa.; J. Morris Brown, Ohio; W. J. H. Bruch, N. J.; James A. Buchanan, Jr., Pa.; Wm. F. Buchanan, Pa.; Wm. H. Campbell, Pa.; George G. Carll, N. J.; Richard A. Cleemann, Pa.; Jas. M. Clement, Md.; Ezra Comley, Jr., Pa.; George B. Dexter, Nova Scotia; George H. Dick, Pa.; Robert Dickey, Pa.; E. L. Dieffenderfer, Pa.; Edward Dodd, N. Y.; Henry A. Drane, Pa.; Thomas M. Drown, Pa.; Frank L. Dubois, Pa.; H. C. Eckstein, Pa.; John Flynn, Pa.; Edward A. Frink, Me.; J. R. Gibson, Pa.; Jas. M. Good, Pa.; Henry S. Gross, Pa.; Edward F. Guth, Pa.; N. F. Hallman, Pa.; D. Claude Handy, Md.; Napoleon Hickman, Del.; Lloyd W. Hixon, Mass.; Silas P. Holbrook, Mass.; J. A. Jack, Pa.; W. H. Johnson, Pa.; J. H. Kauffman, Pa.; Lucien H. Kendall, Pa.; Robert D. King, Nova Scotia; Harvey Kratz, Pa.; John A. Laros, Pa.; Abia H. Light, U. S. A.; Manoah S. Long, Pa.; Abraham Mass, Pa.; Montrose M. Magoffin, Pa.; J. A. McBride, Pa.; Allan A. McClure, W. I.; Danl. McMurtrie, Pa.; Wm. C. Merillat, Va.; P. Middleton, Pa.; Saml. N. Miles, N. B.; S. J. Fergus Miller, Ohio; Geo. W. Nebinger, Pa.; Hiram J. Noyes, Mass.; J. H. Nonamaker, Pa.; Gerald D. O'Farrell, Pa.; Chas. Orendorff, Illinois; Samuel H. Peltz, Pa.; Philip M. Plunkett, Del.; Silas Purdy, N. S.; Jno. A. Raub, N. J.; John M. Rice, Pa.; J. G. Richardson, Pa.; M. C. B. Richardson, N. C.; Jacob Roberts, U. S. A.; Charles M. Robinson, Pa.; Richard R. Rogers, N. J.; S. W. Ruch, Pa.; John J. Saville, Colorado Ter.; Robert G. Sawyer, West Indies; John H. Saylor, Ohio; Adam

Shirk, Pa.; T. W. T. Smith, England; Matthew Stovell, Pa.; Charles Styer, Pa.; Joseph Taylor, Pa.; Richard Thomas, Jr., N. J.; James Reeve Todd, West Indies; A. S. Townshend, Nova Scotia; A. Paul Turner, Ind.; H. R. Wodel, Minn.; Thomas Welsh, Jr., Md.; Horatio C. Wood, Jr., Pa.; I. Gilbert Young, Pa.; J. Watson Young, N. J.

The list foots up ninety-one, which is a considerable decrease from the commencement of last year. The different States were represented as follows:—

Pennsylvania, 52; New Jersey, 6; New Brunswick, 2; Maryland, 3; New York, 1; Massachusetts, 3; West Indies, 3; Illinois, 1; Colorado Territory, 1; Indiana, 1; Delaware, 3; Rhode Island, 1; Ohio, 3; Nova Scotia, 4; Maine, 1; U. S. A., 2; Virginia, 1; North Carolina, 1; England, 1; Minnesota, 1.

Many of the graduates were the recipients of choice bouquets from their friends. The valedictory address was delivered by Joseph Leidy, M.D., Professor of Anatomy. He commenced by remarking that the sight of a diminished class made him think of the troubles that now engrossed our land. The present occasion is full of significance to you, both as men and in your profession. Three years have elapsed since you commenced your studies, and to-day they are crowned with success. It is with anxious heart that we witness your advent into the scenes of your future labors. You must encounter the common temptations of life, both internal and external. The very nature of your office will be misrepresented. It seems a common idea that a physician can be able to prevent death, no matter under what circumstances he labors. Gratitude will not always be enjoyed by you. You will rather encounter the opposite feeling, and the poor will often be your worst censors.

The physician, as a general thing, enjoys a good education, which qualifies him for any society, and his intercourse gives him a welcome, even when his services in the healing art are not required. He occupies the place of a confidential friend. You will oftener succeed than fail in your endeavors for the patient, and from the majority you will receive thanks for their escape from disease or death.

The best wishes of the faculty will follow you from the present moment, and in this confidence we bid you a hearty and respectful farewell. The speaker concluded his address amid much applause.

Philadelphia College of Pharmacy.—The annual commencement of this institution occurred on Thursday evening; also at the Musical Fund Hall. Previous to the opening of the exercises, a beautiful oil painting of Dr. Jackson, of the University of Pennsylvania, was presented to the college by the "Zeta Phi Society," composed of the second graduating class of the institution. The presentation took place in one of the committee-rooms at the Hall.

The degree of Graduate of Pharmacy was conferred upon the following gentlemen by the President, they having passed a thorough examination, and been approved by the Board of Trustees:—

William M. Allen, Philadelphia; Henry Blithe, Montgomery, Pa.; Albert P. Brown, Philadelphia, Pa.; W. G. Buchanan, Philadelphia, Pa.; Edward D. Chipman, Frankford, Pa.; Charles D. Collom, Philadelphia, Pa.; William H. Cooper, Greensboro, Md.; Robert W. Dickson, Philadelphia, Pa.; C. Lewis Diehl, Chicago, Illinois; Edward T. Dobbins, Philadelphia, Pa.; Marcus C. Fetter, Bethlehem, Pa.; Theophilus Fischer, Philadelphia, Pa.; Richard T. Hand, Cape May, N. J.; George Hansell, Rancocas, N. J.; Molton E. Hornbeck, Allentown, Pa.; Henry H. Jacobs, Philadelphia, Pa.; Henry W. Leslie, Pa.; Adolph W. Miller, Saint Paul, Minnesota; Wesley W. Mullen, Philadelphia, Pa.; William D. Naulty, Philadelphia, Pa.; George R. Parry, Philadelphia, Pa.; H. T. Peck, Philadelphia, Pa.; T. A. Rex, Philadelphia, Pa.; Christian Schmidt, Baltimore, Md.; Theodore A. St. Clair, Philadelphia, Pa.; Jacob Senneff, Philadelphia, Pa.; Richard M. Shoemaker, Philadelphia, Pa.; Bennet L. Smedley, Delaware County, Pa.; George M. Smyser, York, Pa.; Clayton N. Wills, Rancocas, N. J.; David L. Wilmer, Philadelphia, Pa.

The graduates of this college were not forgotten by their lady friends in the presentation of beautiful bouquets. The valedictory address was delivered by Prof. Robert Bridges, M.D. It was a scientific production.

Iced Bath in Delirium Tremens.—A practitioner in New York City has been experimenting with a patient suffering from delirium tremens, with, what seems to us, a cruel, and, in a scientific view, unwarranted treatment.

A patient presenting ordinary violent symptoms of delirium tremens, after being left for several days without treatment, was plunged into a bath of ice and water. At the expiration of nine minutes he is reported to have been "perfectly quiet," and was removed. In about four and a half hours the delirium returned, and after some time longer he was again placed in the iced bath. He was this time kept in the bath for twelve minutes, and was then removed, as the report says, "on the verge of syncope and gasping." The pulse had fallen from 82 to 50. The patient lived through this terrible treatment, and it is said that the delirium did not return.

In most institutions where delirium tremens is continually under treatment, but little medication is practiced; and restraint, with rest in darkness, and occasionally some stimulants, narcotics, nauseants, etc., make a favorable termination in nearly all uncomplicated cases.

It is hoped that the above-noticed violent and inhumane treatment will not be repeated.

Large Doses of Quinia in Typhoid Fever.—Dr. C. P. Harrington, of Ashland, Pa., writes us as follows relative to the administration of this drug in typhoid fever. He says:—

"My mode when first called to a patient is to prescribe sixteen grains of the sulphate to begin in the morning, and so on every other day for eight or ten days. During the remission I usually give from four to eight grains, [per day?] according to age and strength of my patient. In the mean time, if the bowels become loose, I give argenti nitras in one-fourth grain doses every four hours, in combination with one-eighth of morphia sulph. If the tongue becomes black and dry I give ten to fifteen drops of ol. terebinth. every four hours; and, as a general rule, my patients are out of bed in about two weeks. I think there is no doubt but that quinia will cut short an attack of typhoid fever, if the physician will pay strict attention to its remissions."

Etherization in Epileptic Convulsions.—Dr. I. Farrar, of Brooklyn, sends us notes of a case in which etherization proved successful in this malady. The patient, aged thirty-three, married, extremely plethoric, was attacked with epileptic convulsions four days prior to her confinement, (primipara.) The paroxysms were quite severe and occurred at intervals of only a few minutes. After administering about three fluid drachms of a compound of ether two parts, with chloroform one, in small quantities at a time dropped upon a napkin, she came out of the "fit," but in a few moments went into another. Venesection was then proposed, but the husband remonstrated, declaring "that she should die in a fit before she should be bled to death." Blood-letting was not insisted upon, but the patient was kept under the influence of etherization for twenty-six hours, when she recovered; and at the expiration of four days from the attack gave birth to a full-time, healthy child. Both mother and child are doing well. Albuminuria and constipation were ascertained to be the principal causes of the convulsions, and the usual remedies were resorted to for these affections.

Naval Medical Board.—The annual examination of candidates for admission into the medical corps of the navy commenced on Monday last, at the Naval Asylum, on Gray's Ferry Road. Fourteen were examined at the first session.

The examiners are Surgeons Green, Wheeler, and Johnson. It is probable the examination will last for two months. Applicants are required to be not less than twenty-one nor more than twenty-six years of age.

Correspondence.

NEW YORK CORRESPONDENCE.

"Ohne Hast, aber ohne Rast."—Göthe's Ring.

This has been an eventful week in the busy city of Gotham. Several Commencments have taken place, and though the general average of graduates has been below the accustomed number, we are at liberty to trust that quality will supply the deficiency of quantity. The present state of our distracted country, though rapidly becoming ameliorated under the wise and judicious administration of an athletic "*Monitor*," has, in no small degree, deminished the number of students, especially those of medicine in this metropolis. The University Medical College, whose Mott and Draper, Paine and Metcalfe, Van Buren and Post, sufficiently indoctrinate the young in the mysteries of physiological and pathological lore, has suffered probably more than any other Nothern institution of a similar character. Yet the number of graduates this year is *sixty-five*. The Southern followers of Hippocrates almost invariably were wont to enter its walls and embrace the gratifying opportunities of acquiring solid information. I trust ere many suns decline upon the thoughtful vision, the usual number of enthusiasts will recompense the labors of such energetic lecturers. The number of graduates from the New York Medical College, for this session, was eleven. Dr. Percey, a man of parts, delivered the annual address. Like those of its predecessors, it was listened to with interest, bore the marks of thought and a good mental digestion, and met with the approbation of those who were the favored listeners.

Dr. Van Buren's discourse before the students of Fourteenth College, of a similar mould as his own organization, gratified those who attended, repaid the diligent aspirant, warned the thoughtless trifler with a human life, and cheered on the man of studies to a proper and appreciative view of ethical practice.

The twenty-eight graduates of Bellevue Hospital College enjoyed the privilege of "Irving Hall" as their birth-place for fame, and became the blest recipients of practical truths from "Simeon," the Draper who cuts his coat according to his cloth; the axiomatic eloquence of versatile Dr. Chapin; and the mellifluous accents of æsthetic Elliott, the pleasing combination of

practitioner, gentleman, and honorable citizen. "Pax vobiscum." This institution cannot fail to succeed. Its advantages are inestimable!

Twenty-third Street, or rather the College of Physicians and Surgeons, that can boast of a Dalton — chemical philosopher and patriotic follower of "Constitutional" Hygiene — brought forth some fifty students of acknowledged merit. Rare opportunities are now afforded those who can avail themselves of army privileges.

GOURMET.

NEWS AND MISCELLANY.

American Medical Association.—The delegates to this Association from this city, upon consultation, have come to the conclusion to advise that no meeting of the Association be held at Chicago the present year, as the Southern States would not probably be represented. We are pleased to find our position upon the subject so emphatically indorsed.

Philadelphia Hospital.—The examination of candidates for resident physicians of this hospital took place on Monday evening at the office of the Guardians of the Poor. Some twenty presented themselves, of whom eight will be appointed.

Dr. Edgar Holden, of Newark, N. J., is one of the surgeons on board of the U. S. ship Minnesota recently engaged in the action in Hampton Roads.

Sick and Wounded at Newport News.—The number under medical treatment on the 15th instant at this place was: In camp hospital, 48; in quarters, 72; transferred to Fortress Monroe, 13; in all, 133. This does not include the sailors wounded during the late naval engagement.

Mortality in the Army of the Potomac.—The most exaggerated statements have been made, by the President of the Sanitary Commission and others, in regard to the number of deaths per month in the army of the Potomac. The number has been stated at 2000. Official statements show the following to be the facts: The number of deaths among the regulars stationed at Washington, for the quarter ending with March, 1861, was 28; for that ending with June, 33 regulars and 46 volunteers; for that ending with September, 56 regulars and 749 volunteers; for that ending with December, 108 regulars and 2970 volunteers. Total, 3990, of which 100 were from wounds. This includes returns from 257 regiments.

The Oil Wells of Pennsylvania.—The amount of oil now being raised from the oil wells of Pennsylvania is astounding — 250,000 barrels weekly, or 13,000,000 barrels a year. If all issued from one well, nearly half a barrel would be thrown out every second, and the whole discharge would fill a lake two miles long and ten feet deep. This enormous amount, which almost bewilders the mind in the attempt to grasp its huge dimensions, it is said may be indefinitely increased. This oil has, to some extent, been used as a medicine for both internal and external use, under the name of Rock oil. Its therapeutic uses, save as a stimulant of a peculiar nature in certain cases, are not extensive.

One hundred of the sick and wounded of the Burnside Expedition arrived at New York last week, under the charge of Dr. Hitchcock, of Mass.

The Legislature of New York have passed a stringent law against the adulteration of, and to prevent the traffic in, impure and unwholesome milk. The penalty is fifty dollars fine, or imprisonment thirty days in the penitentiary or county jail for the adulteration, and one hundred dollars fine, or imprisonment, in the discretion of the court, or both, for the traffic. The law is a good one, and eminently necessary in a hygienic point of view, no doubt; but will it be enforced?

Nature of Wounds received in the Naval Engagement with the Merrimac.—A surgeon, who was on board of the Cumberland in its late engagement with the Merrimac, says: "The number of wounded was unusually small in comparison with the number killed outright. The fire of the *Merrimac* was too close, and so fearful that almost every man who was struck at all was killed. Neither were the wounds themselves of the ordinary character. They almost invariably took off the head and one shoulder, or cut the body directly in two. The only insignificant wound which I dressed was in the case of one of the crew who had his hand taken off. Mr. Rhodes, who was among the last killed, died after we had reached the shore, from the effects of a concussion he had received, and his body not being at all mangled. He was a stout, robust man of fifty, and a strong, active sailor. Com. Pendergrast did not receive a single scratch, although exposed to the full danger. I came off in the same boat with him. After fifteen or twenty minutes I did not pretend to amputate a limb, as the number of the wounded was so great, and their suffering so terrible. I put on tourniquets to stop the hemorrhage, however, and administered draughts to prevent prostration. The scene on the gun-deck was frightful. Many of the dead had been literally blown to pieces, and yet the living, unconscious how soon their own turn might come, seemed also unconsious of danger, and moved about with the greatest coolness."

DIED.

COOK.—At Hackettstown, N. J., on the 10th inst., Mrs. Janet Cook, wife of Dr. L. C. Cook, and daughter of the late Wm. Hall, of New York City.

SCOTT.—In Astoria, L. I., on Saturday morning, March 15th, Jane Heyer, wife of John W. Scott, M.D., of Astoria, and eldest daughter of the late Cornelius R. Suydam, Esq., of New York, aged thirty-nine years.

Communications Received.

Connecticut—Drs. J. B. Snow, A. J. Jacques, Wheeler & Co., T. A. Dutton, R. C. McEwen, T. H. Debowes, each with encl.; J. D. Mears, Drs. C. A. Lindsley, C. L. Ives, J. C. Lyons, J. Deacon, J. S. Doherty, E. C. Knight, J. W. Lawton, each with encl.; Drs. P. W. Ellsworth, Burpee, Bromley, Johnston, White, Crabtree, G. S. Brown, each with encl. *Dist. of Columbia*—H. E. Wilkinson, L. A. Edwards. *Illinois*—E. A. D'Arcy, N. G. Blalock, Dr. M. Shepherd, with encl.; Dr. Wm. McKnight, with encl. *Indiana*—Dr. R. O. Crandel, with encl. *Iowa*—M. Cousins. *Kentucky*—J. D. Jackson, D. Johnston. *Maine*—Dr. J. S. Hay, with encl.; *Maryland*—J. T. Calhoun, Dr. G. M. Upshur, with encl. *Massachusetts*—G. W. Fay, Dr. F. V. Balch, with encl.; J. F. Wakefield, C. Cullis, W. E. Wright, Dr. B. De Gersdorff, with encl. *Michigan*—W. J. McHench, Dr. W. H. Johnson, D. Wheelock, each with encl.; Dr. E. Reading, H. W. Lobdell, with encl. *New Jersey*—L. S. Blackwell, Drs. A Coles, W. Green, C. H. Skiff, J. F. Ward, W. Cook, E. P. Beck, D. E. Gardiner, R. M. Wilkinson, each with encl.; Drs. J. H. Janeway, W. J. Lytle, C. Dunham, each with encl.; A. Williams, A. Coles, W. Green, Drs. L. Burr, J. S. Mulford, each with encl.; Dr. D. G. Hetzel, E. Reed, Pugh, each with encl.; A. Bourne, J. W. Snowden, Dr. W. Jackson, with encl. *New York*—Geo. K. Smith (2), A. C. Camphell, O. C. Gibbs, B. B. Matthews, Dr. H. E. Crampton, with encl.; H. L. Horton, Drs. C. Whaley, W. M. Day, J. G. Dolley, H. W. Lewis, H. Colbourne, E. H. Davis, H. L. Williams, J. D. Hall, T. Nold, W. Russel, A. B. Harvey, W. R. Holbrook, W. B. Stebbings, L. M. Barclay, L. G. Wiggins, C. Brown, A. P. Cook, W. H. Pitcher, S. Hornby, Jones, Peck, Cuthbert, Dunham, each with encl.; T. C. Brinsmade, W. Kilmer, G. S. Bedford, J. O. Cobb, N. C. Husted, D. L. D. Sheldon, I. Farrar, Dr. O. C. Alexander, with encl.; W. S. Babbitt, S. D. Willard, J. D. Havens, Dr. J. R. Wood, with encl.; C. L. Mitchell, J. B. Graves, L. G. Hall, C. H. Smith. *Ohio*—J. Merrill. Dr. E. Sterling, with encl.; W. M. Lyon, H. L. Chaney, Dr. J. H. Pulte, E. Lynch, M. L. Wilson, with encl.; Drs. E. R. Bell, C. W. F. Fischer, each with encl.; E. Sterling. *Pennsylvania*—A. P. Dutcher, H. Brubaker, Drs. F. C. Reamer, W. H. Watson, W. J. Sikes, each with encl.; G. F. Horton, J. Riley, Dr. A. M. Miller, with encl.; A. L. Cresler (2), D. W. Bashore, G. W. Burk, W. Voss, E. Hottenstein, J. B. Livingston, C. B. Herrington. S. S. Kennedy, Drs. J. Fulton, C. Shoemaker, each with encl.; F. J. Kern, W. H. Seip. A. Sheller. *Vermont*—A. A. Doty.

Office Payments.— Drs. Senderling, MacIntosh, Ludlow, Brunon, Glentworth, Price, Harper, Brandis, White, Sinclair, Rowe, Hughs, Bicknell, Hoopes.

MEDICAL SITUATION.

A New Jersey physician, desirous of relinquishing practice, offers his situation for sale. House large and roomy, with lawn in front. Full complement of out-buildings and four acres of land. Village and country around constantly improving. A rare opportunity for a physician with small family and some means. Value of property, $5000. One-half may remain on mortgage.

Inquire of Dr. S. W. BUTLER, or of CHARLES ELLIS, 724 Market Street. 283—6t

TO THE MEDICAL PROFESSION.

Having relinquished *general* practice, the undersigned, formerly a "Fellow of the Massachusetts Medical Society," and a "Permanent Member of the American Medical Association," begs leave to inform the Profession that he has opened a *Sanatorium* and *School* for the *Physical* and *Mental Education of Young Ladies*, and for the *Medical Treatment of Nervous Invalids.*

Refers to the Editors of the REPORTER, and to the Faculty generally. WM. M. CORNELL, M.D.,
283—tf. *At No.* 1432 *South Penn Square, Philadelphia.*

Medical Directory.

PENNSYLVANIA HOSPITAL, Eighth, below Spruce. Entrance on Eighth Street.

Medical Clinic on Wednesdays and Saturdays, at 10 A.M., by Dr. F. Gurney Smith.

Surgical do., at 11 A.M., by Dr. Joseph Pancoast.

MEDICAL LIBRARY OF THE PENNSYLVANIA HOSPITAL.—Open on Wednesdays and Saturdays.

WILLS HOSPITAL FOR THE EYE AND LIMB.—Clinics, Wednesdays and Saturdays, at 11 A.M., by Dr. William Hunt.

HOWARD HOSPITAL, Lombard Street, between Fifteenth and Sixteenth.

Clinical Lectures daily, at 12 M., 1 and 5 P.M. Monday and Thursday—Dr. Turnbull, at 1 P.M. Tuesday and Friday—Dr. Darrach, at 12 M.; Dr. Klapp, at 5 P.M. Wednesday and Saturday—Dr. Neff, at 12; Dr. Tryon, at 1; and Dr. Morehouse, at 5 P.M. Monday and Thursday—Dr. Meigs, at 5 P.M. Tuesday and Friday—Dr. Atkinson, at 3½ P.M.

JEFFERSON MEDICAL COLLEGE, Tenth, above Walnut.

Surgical Clinic on Wednesdays and Saturdays, at 12½ M., by Dr. S. D. Gross.

PENNSYLVANIA COLLEGE OF DENTAL SURGERY, 528 Arch Street.—Clinical Lectures daily, (except Sunday,) from 2 to 4 P.M., by Dr. Goodwillie.

PHILADELPHIA LYING-IN CHARITY.—Clinic for diseases of females, at "Nurse's Home," S. W. corner Eleventh and Cherry, every Wednesday and Saturday morning, at 9 o'clock, by Dr. Edwin Scholfield.

WATER:

Its History, Characteristics, Hygienic and Therapeutic uses.

BY SAMUEL W. FRANCIS, M.D., OF NEW YORK.

CONTENTS.—Religious History. Mythological History. Profane History. In Therapeutics. In Anatomy and Physiology. Water as a Drink. In Chemistry. In Natural Philosophy. In Geology. In Botany. Virtues of Water. Mineral Waters. Inhabitants of Water.

A learned and scientific essay, elaborate in research and complete in detail, it will richly repay perusal.

For sale at the Office of the REPORTER, N. E. cor. 7th and Sansom Streets, in this city; and in New York, by S. S. & W. WOOD, 389 Broadway.

PRICE FIFTEEN CENTS.

The Book will be sent to any address, postage paid, on receipt of price.

TO MEDICAL STUDENTS.

The undersigned would respectfully inform Medical Students that he proposes to receive a class, not exceeding *twelve*, for purposes of instruction. Daily recitations will be held, and lectures given upon all the more immediately practical departments of Medicine. Students who have attended one course of lectures, and are preparing for graduation, will be preferred. Access will be given to a good library, and all the journals of the country are regularly received. He is situated in a pleasant village, with romantic surroundings. Those who wish to avail themselves of this opportunity will address the undersigned at once.

Terms of instruction, $1 00 per week. Board, $2 50.

Please Address

O. C. GIBBS, M.D.,

THE DISEASES OF WOMEN AND CHILDREN.

BY GUNNING S. BEDFORD, A.M., M.D.,

Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; Author of the Principles and Practice of Obstetrics.

SEVENTH EDITION, CAREFULLY REVISED. 8vo. 653 pp.

WILLIAM WOOD, 389 BROADWAY, NEW YORK.

Price $3.25, by Mail, free of postage.

The rapid and wide-spread circulation of this eminently practical work is, we think, without precedent. It is a storehouse of knowledge for the student and practitioner of medicine—full of practical precepts and bedside information. Rarely has any medical publication met with such universal commendation from the medical press, both at home and abroad. It has been so highly appreciated in Europe, that it has received the unusual compliment of a translation into the French and German languages.

From the American Medical Times.

"Successful as the work has been at home and abroad, we were not prepared to see it achieve a success exceedingly rare in the history of American medical authorship, viz., *a Translation into the French and German Languages.* We congratulate the author upon this high compliment paid to his labors in the still new field of uterine pathology, where so many struggle vainly for reputation. While this translation is the highest possible acknowledgment of the value of Dr. Bedford's labors, it secondarily reflects creditably upon the rising importance of the American school of medicine."

From the N. Y. Jour. of Med. and the Collateral Sciences.

"We hail the advent of such a work, abounding in practical matter of the deepest interest, and illustrated by principles and laws ordained by nature. Nor can we refrain from expressing our surprise and gratification at finding the book so remarkably exempt from the superficial views that abound in the great thorougfare of medicine. The rapid sale of this work we believe to be unprecedented in the history of medical literature in this country, which must be highly gratifying to the author, showing, as it does, the degree of estimation placed upon his labors by the medical public."

From the British and Foreign Med.-Chir. Review.

"We are quite sure that the work will be a welcome addition to professional libraries in Great Britain as well as America."

From the Cincinnati Medical Journal.

"We think this the most valuable work on the subject ever presented to the profession. We have perused every page of the book with interest, and speak, therefore, from personal knowledge."

From the London Lancet.

"A careful perusal of Dr. Bedford's book has led us to believe that its value will continue to be acknowledged, and the author recognized as a most able and acute practitioner of medicine. The work is of the most practical character; everything is made to tend toward the relief and treatment of disease, and remarkable skill is shown in quickly arriving at an accurate diagnosis. To get at once to the point is the pervading characteristic of the author's teachings. We cordially recommend it to all practitioners and students of medicine."

From the London Medical Times and Gazette.

"It is to be regretted that we have not more such books in Great Britain."

From the London British Medical Journal.

"The style of the author is very graphic. The book not only proves Dr. Bedford to be a sound physician and an excellent clinical teacher, but it also affords evidence of an extensive acquaintance on his part with the literature of his subject on this side of the Atlantic."

From the Gazette Medicale, Paris.

"An examination of this work convinces us that the author possesses great talent for observation, and that his opinions are sound and practical. He shows an intimate knowledge of the doctrines of the ancients and the opinions of the moderns. The variety of instruction contained in this volume, the ability with which it is presented, and the truthful practical character of the doctrines advanced, give to it very great value."

From Rankin's Half-Yearly Abstract of the Med. Sciences.

"The workingmen in America are always on the look-out for the new lights rising over the Old World, and they often too hastily adopt, as the pure gold of science, the crude lucubrations which must find place with more valuable matter in the weekly medical press. But this observation does not apply to our author, who is creditably known by other works, and in the one before us shows himself to be a judicious physician, anxious alike for the good of his patients and of his pupils; one who has acquired the happy art of teaching how to get at the characteristics of disease, and how to drag at the chain of effects, until the mind grasps the first link in the chain."

From the New York Medical Times.

"The subjects have been developed with no ordinary powers of clinical instruction"

From the Philadelphia Medical Examiner.

"We have been both pleased and instructed by a perusal of the book, and confidently recommend it, therefore, to the profession, as an excellent repertorium of clinical medicine. The eminently practical ideas of the author, clothed in simple and perspicuous language, are delivered in quite an attractive, affable, and off-hand manner."

From the Charleston Medical Journal and Review.

"It is not often that British critics commend an American book; so when their approval is obtained, we may rest assured that the work commended is of no ordinary merit. Dr. Bedford's book is characterized by Dr. Churchill as '*worthy of its author, a credit to his country, and a valuable mine of instruction to the profession at large.*' We have read every page of the work, and feel called upon to say that we regard it the most valuable contribution on the subject ever offered to the profession."

From the Virginia Medical and Surgical Journal.

"A work of great practical interest—one well calculated to interest and instruct the busy practitioner; it points out to him the most modern therapeutical agents, and their method of administration; and, above all, gives beautiful and satisfactory explanations, physiologically, of the symptoms of disease. This latter quality is a great merit of the book. As a faithful representation of the daily labors and duties of a physician of our day, and as an accurate delineation of the diseases of women and children, it is well deserving of our praise."

From the Dublin Quarterly Journal of Medical Science.

"We were actually fascinated into reading this entire volume, and have done so most attentively; nor have we ever read a book with more pleasure and profit. There is not a disease connected with infancy or the female system which is not most ably discussed in this excellent work."

From the New Jersey Medical Reporter.

"Professor Bedford's book is a good one. We like it, for we can digest a dinner over it without going to sleep, and that is more than we can say of most medical books."

From the Midland Quarterly Journal of Med. Sciences, London.

"To read this work is to be struck with its truthfulness and utility; we find all that is useful in practice ably communicated and elegantly expressed. American works are not generally read on this side the Atlantic, but we recommend Dr. Bedford's book as worthy of the very best attention of the profession."

From the Philadelphia Medical and Surgical Journal.

"We have said, on former occasions, that the man who will bring forward *clinical* or practical instruction to bear upon the medical teachings of our country, will be immortalized. We want practical observations—fresh from the bedside. Dr. Bedford's volume is drawn from an extensive clinic, founded by him in the University of New York, and is fortified by much reading and research. This is a good book, and the profession owes Dr. Bedford hearty thanks for the labor he has bestowed upon it."

From the Southern Med. and Surg. Journal, Augusta, Georgia.

"The work before us is eminently practical, and therefore valuable as a contribution to medical knowledge. Prof. Bedford's extensive opportunities have enabled him thus to bring together a large number of the most interesting cases of female and infantile affections, and to indicate his views of their treatment. In the accomplishment of the task, the author has evinced a degree of discernment which will, doubtless, add materially to his already extended reputation."

From the New Hampshire Journal of Medicine.

"No one can read this book without becoming convinced that it contains much valuable instruction, and is the result of a large experience in this specialty."

From the Boston Medical and Surgical Journal.

"The work contains graphic descriptions of the diseases of women and children, with judicious advice as to treatment."

2t—aw.

MEDICAL WORKS

PUBLISHED BY

J. B. LIPPINCOTT & CO.,

PHILADELPHIA.

Will be sent by mail, postpaid, on receipt of the price by the Publishers.

MACLEOD'S
SURGERY OF THE CRIMEAN WAR.

NOTES ON THE SURGERY OF THE WAR IN THE CRIMEA, with Remarks on the Treatment of Gunshot Wounds. By GEORGE H. B. MACLEOD, M.D., F.R.C.S., Surgeon to the General Hospital in Camp before Sebastopol, Lecturer on Military Surgery in Anderson's University, Glasgow, etc. etc. One vol. 12mo. $1.50.

SUMMARY OF CONTENTS.

Chap. I.—The History and Physical Characters of the Crimea. The Changes of the Seasons during the occupation by the Allies. The Natives, and their Diseases.

Chap. II.—Drainage of the Camp. Water Supply. Latrines. Food. Cooking. Fuel. Clothing. Housing. Duty. Effect of all these combined on the health and diseases of the soldiers. Hospitals. Distribution of the Sick. Nursing, male and female. Transport.

Chap. III.—The Campaign in Bulgaria, and its effects on the subsequent health of the troops. The Diseases which appeared there, and during the Flank March, as well as afterward in the Camp before Sebastopol.

Chap. IV.—Distinction between Surgery as practiced in the Army and Civil Life. Soldiers as Patients, and the character of the Injuries to which they are liable. Some peculiarities in the wounds and injuries seen during the war.

Chap. V.—The "Peculiarities" of Gunshot Wounds, and their General Treatment.

Chap. VI.—The use of Chloroform in the Crimea. Primary and Secondary Hemorrhage from Gunshot Wounds. Tetanus. Gangrene. Erysipelas. Frost-bite.

Chap. VII.—Injuries of the Head.

Chap. VIII.—Wounds of the Face and Chest.

Chap. IX.—Gunshot Wounds of the Abdomen and Bladder.

Chap. X.—Compound Fracture of the Extremities.

Chap. XI.—Gunshot Wounds of Joints. Excision of Joints, etc.

Chap. XII.—Amputation.

FROM SURGEON-GENERAL HENRY H. SMITH.

GENTLEMEN:—I thank you for the copy of Macleod's Surgery as published by you.

With the English Edition I am very familiar, and regard it as one of the best of the modern works on Military Surgery.

Its republication at the present moment is a valuable contribution for our Army Surgeons, all of whom should have it.

Very truly, yours,

HENRY H. SMITH.

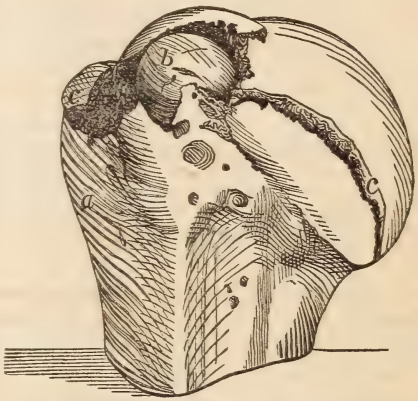
MESSRS. J. B. LIPPINCOTT & Co.
Philadelphia, Dec. 3, 1861.

GUTHRIE'S
SURGERY OF WAR.

COMMENTARIES ON THE SURGERY OF THE WAR

IN PORTUGAL, SPAIN, FRANCE, AND THE NETHERLANDS,

From the battle of Roliça, in 1808, to that of Waterloo, in 1815, with additions relating to those in the CRIMEA, in 1854–55; showing the improvements made during and since that period in the great art and science of surgery on all the subjects to which they relate. By G. J. GUTHRIE, F.R.S. One vol. 12mo. [Nearly ready.]



a. The head of the humerus sawn off below the tuberosities.
b. The ball.
c c. Fractures of the head of the bone.

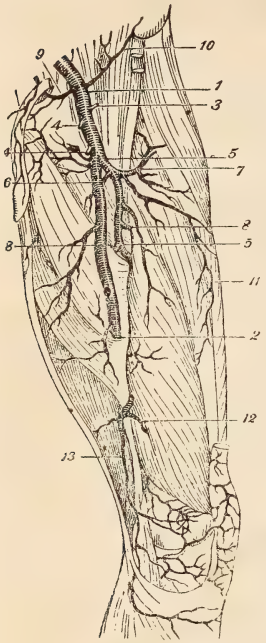
[FROM THE PREFACE TO THE SIXTH LONDON EDITION.]

"The rapid sale of the fifth, and the demand for a sixth edition of this work, enable me to say that the precepts inculcated in it have been fully borne out and confirmed by the practice of the Surgeons of the army in the Crimea in almost every particular. * * * They have performed operations of the greatest importance at my suggestion, that had not been done before, with a judgment and ability beyond all praise; and they have modified others to the great advantage of those who may hereafter suffer from similar injuries.

* * * * * * * *

"The precepts laid down are the result of the experience acquired in the war in the Peninsula, from the first battle of Roliça, in 1808, to the last in Belgium, of Waterloo, in 1815, which altered, nay, overturned, nearly all those which existed previously to that period, on all the points to which they relate. Points as essential in the surgery of domestic as in military life. They have been the means of saving the lives, and of relieving, if not even of preventing, the miseries of thousands of our fellow-creatures throughout the civilized world."

Agnew's Practical Anatomy. A new arrangement of the London Dissector, with numerous modifications and additions: containing a concise description of the Muscles, Nerves, Blood-vessels, Viscera, and Ligaments of the Human Body as they appear on Dissection. With Illustrations. By D. Hayes Agnew, M.D., Lecturer on Anatomy, and Surgeon to the Philadelphia Hospital, (Blockey.) One vol. 12mo. $1.00.



This work has been adapted to the use of the American student by altering the arrangement and changing the nomenclature in many cases; by adding the ligamentous system; by illustrations; by erasing what was unnecessary, and presenting the whole as nearly as possible in the topographical order. The work, as now published in this American edition, has been prepared with a single eye to the faithful economy of the student's time.

Beck's Elements of Medical Jurisprudence. Eleventh edition. By Theodric Romeyn Beck, M.D., LL.D., Professor of Materia Medica in the Albany Medical College, etc.; and John B. Beck, M.D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the City of New York, etc. With notes by an association of the friends of Drs. Beck. The whole revised by C. R. Gilman, M.D., Professor of Medical Jurisprudence in the College of Physicians and Surgeons of New York. Two vols. 8vo. $10.00.

Beck's Medical Jurisprudence has so fully established its character as a standard on that subject, by its numerous editions, both in England and this country, that it is unnecessary to speak of its merits. Mr. Warren, the distinguished English legal writer, in his introduction to Law Studies, says of it:—

"The best work, by far, upon the subject of forensic medicine, of all those which have come under the author's notice, is the Medical Jurisprudence of Dr. Beck, which is not only an instructive, but a highly interesting work."

The eleventh American edition, which you have afforded me the opportunity of examining, is evidently a very great improvement upon all previous editions. The large amount of new matter accumulated by Dr. T. R. Beck before his death, has been judiciously introduced by his able professional friends, to whom it was entrusted, and has rendered the work as complete as it is invaluable.

Very truly, yours,

GEO. SHARSWOOD.

Louisville, Ky, Dec. 24, 1859.

I am glad to have the opportunity to read the last edition (1860) of Beck's Medical Jurisprudence. This is the best work on the subject of general medical jurisprudence ever published; and the labors of Dr. Gilman have contributed much to the value of the present edition.

Very respectfully,

HENRY PIRTLE.

Roslyn, N. Y., Jan. 13, 1860.

I am well acquainted with the great merits of Dr. Beck's work, which I have been in the habit of considering as the only real cyclopedia of medical jurisprudence in our language. . . . . It is so invaluable both to law and medical practitioners, that I cannot conceive of any work extant which will, in all particulars, furnish such orthodox opinions.

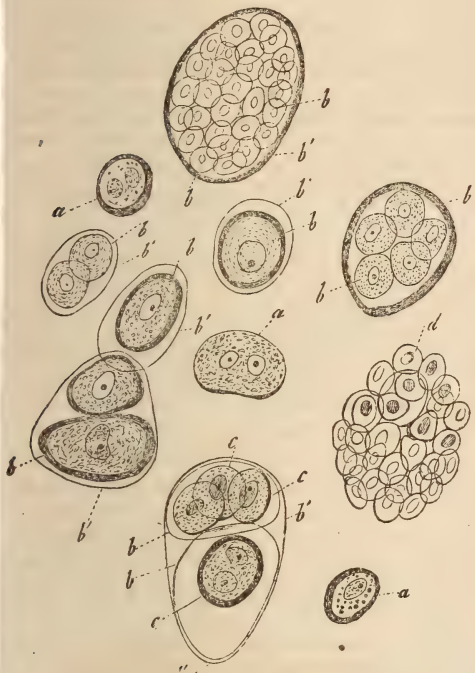
Respectfully yours,

JNO. ORDRONAUX.

Leidy's Human Anatomy: An Elementary Text-book for Students. By Joseph Leidy, M.D., Professor of Anatomy in the University of Pennsylvania. Elegantly illustrated from numerous original drawings. One vol. 8vo. $5.00.

View of the Heart, with the anterior portions of the ventricle removed.

Kolliker's Manual of Human Microscopical Anatomy. By A. Kolliker, Professor of Anatomy and Physiology in Wurzburg. Translated by Geo. Bush, F.R.S., and Thomas Huxley, F.R.S. Edited, with notes and additions, by J. Da Costa, M.D. Illustrated by 313 engravings on wood. One vol. 8vo. $3.75.



Cartilage cells from a fibrous, velvety, articular cartilage of the condyle of the femur of man, magnified 350 diameters.

It would be useless for us to attempt a review of this work, for the text is so fully illustrated by engravings, and is so intimately associated with them, that we cannot extract any part as a sample of the style, without weakening its force, for the want of its accompanying illustration. The book must be read and studied before an adequate idea can be formed of its value and excellence. The book comes from such high authority, and is indorsed by such competent judges, as to make it at once indispensable to the student of microscopic anatomy. We hope it will have an extensive circulation.—*Western Lancet.*

The reputation of Professor Kolliker, acquired by his former and larger work on microscopical anatomy, will be enhanced by this text-book on Histology, for such it is destined to be pre-eminently. The text is fully illustrated by engravings, greatly adding to the value of the work, and accompanied by explicit explanations of the figures. We commend it to the profession, and to students especially, as worthy of their patronage.—*New York Medical Gazette.*

Storer's Criminal Abortion. Criminal Abortion in America. By H. R. Storer, M.D. One vol. 8vo. $1.00.

Mitchell's Materia Medica and Therapeutics. Materia Medica and Therapeutics, with ample illustrations of practice in all the departments of medical science, and copious notices of toxicology; the whole adapted to the wants of medical pupils and practitioners. By Thomas D. Mitchell, M.D., Professor of the Theory and Practice of Medicine in the Philadelphia College of Medicine, etc. etc. Second edition. One vol. 8vo. $4.00.

We take much pleasure in noticing this able work of Dr. Mitchell, and can assure our readers it is one of the best works on materia medica and therapeutics that has been published. It is written in a style that interests and instructs at the same time.—*Boston Med. and Surg. Journal.*

This new work, upon an old subject, will be found to embody a variety and amount of practical information in this department which are not to be met with in any one of the numerous treatises on materia medica or therapeutics, or both, with which the profession has been favored. The ample illustrations of practice in all the departments of medical science, with the very ample notices of toxicology, etc., render it a valuable book for students, and also adapt it for reference by practitioners, both of which purposes are subserved by its alphabetical arrangement.—*N. Y. Medical Gazette.*

Thomson's Domestic Medicine: A Dictionary of Domestic Medicine and Household Surgery. By Spencer Thomson, M.D., L.B.C.S. Edinb. First American, from the last London edition. Revised, with additions, by Henry H. Smith, M.D., Professor of Surgery in the Pennsylvania University. One vol. 12mo. $1.50.

This work has received the highest encomiums from the critical journals of the day. "Many a useful life," remarks a British periodical, "might have been spared, and many an insidious disease checked in the bud, had such works as that of Dr. Thomson been earlier in existence. To the traveler by sea or by land, to the settler and the emigrant, far from medical aid, it must prove invaluable."

The work has been carefully adapted to the American climate and habits by Dr. Henry H. Smith, of Philadelphia, whose contributions to the volume have greatly added to its value. It is the standard book of domestic medicine. The arrangement of the subjects in alphabetical order renders it extremely convenient for prompt reference and consultation.

Bernard and Robin on the Blood.—Notes of M. Bernard's Lectures on the Blood, with an Appendix, giving an account of the latest studies of M. Robin, the celebrated microscopist. By Walter Franklin Atlee, M.D. One vol. 12mo. Cloth, 75 cents.

Memoranda Medica; or, Note-book of Medical Principles. By Henry Hartshorne, M.D., Professor of the Theory and Practice of Medicine in the Medical Department of Pennsylvania College. One vol. 12mo.

Longmore's Gunshot Wounds. A Treatise on Gunshot Wounds. By T. Longmore, Deputy Instructor of Hospitals, Prof. of Military Surgery at Fort Pitt, Chatham. In two Parts. One vol. 12mo.

Part I. Gunshot Wounds in General.
Part II. Gunshot Wounds in Special Regions of the Body.

Florence Nightingale's Notes on Hospitals. Notes on Hospitals: being Papers read before the National Association for the Promotion of Social Science, at Liverpool, in October, 1858, with evidence given to the Royal Commissioners on the state of the Army in 1857. By Florence Nightingale.

Acton on the Urinary Organs. A Practical Treatise on Diseases of the Urinary and Generative Organs in both Sexes. Part I.—Non-specific Disease. Part II.—Syphilis. By William Acton, late Surgeon to the Islington Dispensary, and formerly Externe at the Female Veneral Hospital, Paris. From the second London edition. With additional Illustrations and Colored Plates. One vol. 8vo. $4.00.

This work is intended to be used by the student as a complete text-book on the subjects of which it treats; and, at the same time, to supply data for the surgeon desirous of learning the most modern treatment of the protean forms of Syphilis, as well as materially to assist the practitioner who, in the witness-box, is liable to be cross-examined on many of the most intricate questions of generation, absorption, or contagion.

Campbell's Secretory and Excito-Secretory System. Essays on the Secretory and the Excito-Secretory System of Nerves, in their relations to Physiology and Pathology. Comprising, I. A new classification of febrile diseases. II. An exposition of the ganglionic pathology of all continued fevers, as illustrated in typhus and typhoid fever. III. The Prize Essay on the excito-secretory system of nerves in its relations to physiology and pathology. IV. A letter to Dr. Marshall Hall, of London, claiming priority in the discovery and naming of the excito-secretory system of nerves. By Henry Fraser Campbell, A.M., M.D., one of the Vice-Presidents of the American Medical Association, and Professor of Anatomy in the Medical College of Georgia at Augusta. One vol. 8vo. $1.25.

Ricord on Venereal Diseases. A Practical Treatise on Venereal Diseases; or, Critical and Experimental Researches on Inoculation applied to the study of these affections: With a therapeutical summary and special formulary. By Ph. Ricord, M.D., Surgeon of the Venereal Hospital of Paris, Clinical Professor of Special Pathology. Translated from the French by A. Sidney Doane, A.M., M.D. Thirteenth edition. One vol. 8vo. $1.50.

M. Ricord's reputation as a lecturer and practitioner in Paris is of the highest order. He is distinguished for his sound and philosophical views upon a disease which carries terror wherever it appears, and whose consequences are often felt by the innocent as well as the guilty. The first part of the book partakes of the philosophical spirit of its author, while in the pages devoted to the treatment of syphilis, M. Ricord has spread out the results of thousands of cases coming under his observation.

Warrington's Obstetrics. The Obstetric Catechism: containing three thousand two hundred and forty-seven questions and answers on obstetrics proper. By Joseph Warrington, M.D. 150 illustrations. One vol. 12mo. $1.50.

An excellent compend of obstetric science and practice, in a very convenient form for purposes of instruction. The author is a very eminent professor, and the work was intended for the use of his own pupils, and students of medicine generally. The illustrations of the work are very numerous, and of the most useful kind tothe student.

Simpson's Obstetrics. The Obstetric Memoirs and Contributions of James Y. Simpson, M.D., F.R.S, Professor of Midwifery in the University of Edinburgh, etc. etc. Edited by W. O. Priestly, M.D., of Edinburgh, formerly Vice-President of the Parisian Medical Society; and Horatio R. Storer, M.D., of Boston, U. S., one of the Physicians to the Boston Lying-in Hospital, Member of the Medico-Chirurgical and Obstetric Societies of Edinburgh, etc. Two vols. 8vo. Cloth, $6.00; sheep, $7.50.

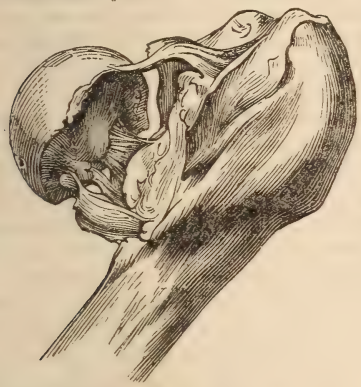
The object of the editors has been to present these Memoirs to the medical profession in a form readily available, so as to facilitate the study of any special inquiry, an object of no slight importance to most medical men engaged in active practice. The papers have appeared at different times in journals some of which are out of print, were inaccessible to the medical public, although anxiously sought for. They are the result of an almost unlimited practical knowledge and experience, and do honor to the literature of the profession.

Mitchell's Essays. Five Essays. By John Kearsley Mitchell, M.D., late Professor of the Practice of Medicine in Jefferson Medical College of Philadelphia, etc. etc. 1. Essay upon the cryptogamous origin of malarious and epidemic fevers. 2. An essay upon animal magnetism, or vital induction. 3. On the penetrativeness of fluids. 4. On the penetrativeness of gases. 5. On a new practice in acute and chronic rheumatism. Edited by S. Weir Mitchell, M.D. One vol. 12mo. $1.25.

The friends of the late Dr. Mitchell, which designation included all who knew him, and the members of the medical profession throughout the land, will welcome this volume as a tribute to his memory, and prize it for its intrinsic value—*North American.*

Reeves's Enteric Fever. A Practical Treatise on Enteric Fever. Being an analysis of 130 consecutive cases, derived from private practice, and embracing a partial history of the disease in Virginia. By JAMES E. REEVES, M.D. One vol. 12mo. $1.00.

Malgaigne's Treatise on Fractures. A Treatise on Fractures. By Professor J. F. MALGAIGNE, of Paris. With over one hundred Illustrations. Translated from the French, with notes and additions, by JOHN H. PACKARD, M.D. One vol. 8vo. $4.00.



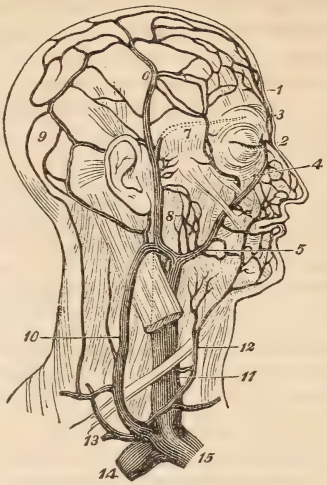
Old Inter-Capsular Fracture, with considerable shortening.

Malgaigne's Treatise has enjoyed so wide a circulation and such well-deserved renown, that we must own to a feeling of surprise at learning that before the appearance of the present work no attempt has been made to present so popular an author in an English dress. The present book, a contribution to our literature from America, is the work of a gentleman whose name is not otherwise known to us, and is one which we can conscientiously pronounce very valuable. . . A very useful book indeed, and one which we hope will have an extensive circulation.—*British and Foreign Med.-Chir. Review.*

Must be regarded as a monument, conspicuous and to be admired, even among the noble monuments of the medical literature of his [the author's] country. As a solid, complete, substantial, highly-finished work, we know of none that is its superior; it can, with justice, be regarded as a model in scientific literature.— *North American Med.-Chir. Review.*

It affords us sincere pleasure to be able to welcome the appearance, in an English dress, of this valuable treatise. The annotations which Dr. Packard has appended to it are numerous, and appear to us to be of much practical value, adapting, as they do, the treatment of fractures to the generally received and most approved American methods. —*Journal of the Medical Sciences.*

Richardson's Anatomy. Elements of Human Anatomy: General, Descriptive, and Practical. With over 400 illustrations. By T. G. RICHARDSON, M.D., Demonstrator of Anatomy in the Medical Department of the University of Louisville, and one of the attending Surgeons to the Louisville Marine Hospital. One vol. 8vo. $3.00.



Veins of the head and neck.

It is an amply sufficient text-book, and the preceptor may confidently place it in the hands of his pupils as such. The wood-cuts are numerous and elegant, and serve admirably to illustrate the text —*New Jersey Medical Reporter.*

Our author claims for his work the improvement of having general, descriptive, and practical anatomy in the same volume; the arrangement of the section devoted to practical anatomy so as to secure the greatest possible economy of material; and lastly, in the substitution of English for Latin terms, wherever it appeared to be practicable and judicious.—*N. Y. Medical Times.*

Wood's Lectures and Addresses. Introductory Lectures and Addresses on Medical Subjects. Delivered chiefly before the medical classes of the University of Pennsylvania. By GEO. B. WOOD, M.D., LL.D., President of the American Philosophical Society, Professor of the Theory and Practice of Medicine, and of Clinical Medicine, in the University of Pennsylvania, etc. etc. One vol. 8vo. $1.75.

Wood's Practice of Medicine. A Treatise on the Practice of Medicine. By. GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania. Fourth edition, improved. Two vols. 8vo. $7.00.

This is far the best work on the practice of medicine in the English language, and we recommend it strongly to the attention of our readers. It is much fuller than Dr. Watson's admirable lectures, while it is less lengthy than the Library or Cyclopædia of Medicine; and it has this further advantage over the two last-named works—that while they are far behind, it is a fair reflex of the actual state of knowledge. —*London Medical Times and Gazette.*

Wood's Therapeutics. A Treatise on Therapeutics and Pharmacology, or Materia Medica. By GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, Senior Physician of the Pennsylvania Hospital, one of the authors of the United States Dispensatory, author of a Treatise on the Practice of Medicine, etc. etc. Two vols. 8vo. $7.00.

In his preface Dr. Wood gives the following account of his opportunities for acquiring knowledge and forming just views on the subjects embraced in this treatise:—

"Almost from the commencement of his professional life the author has given peculiar attention to this branch of medical knowledge. For a period of about thirty years, before 1850, when he was transferred to the professorship which he now occupies, he was engaged in teaching materia medica, first as a private lecturer, and afterwards successively in the Philadelphia College of Pharmacy and the University of Pennsylvania. His position, therefore, rendered constant investigations into the properties, effects, and uses of remedies necessary in order at once to do justice to his pupils and avoid discredit to himself. Most of those whom he now addresses are probably aware that he is one of the authors of the United States Dispensatory. To provide the original materials for his portion of that work, and to gather from time to time the knowledge requisite for its maintenance upon a level with the progressive condition of medical science, unremitting diligence was essential in prosecuting inquiry and investigation in the whole field of pharmacology. In addition to the ordinary professional opportunities, he has for about twenty years held the office of one of the physicians of the Pennsylvania Hospital, which has given him facilities for testing the value of remedies greater than any amount of private practice could afford. Few persons have had greater advantages or stronger inducements than himself for acquiring the knowledge requisite for the production of a work of this kind."

Wood and Bache's Dispensatory. The Dispensatory of the United States: consisting of

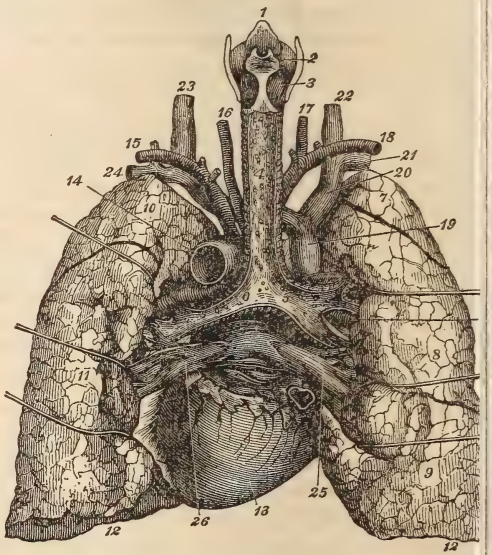
1. A treatise on Materia Medica, or the natural, commercial, chemical, and medical history of the substances employed in medicine, and recognized by the Pharmacopœias of the United States and Great Britain;

2. A treatise on Pharmacy: comprising an account of the preparations directed by the American and British Pharmacopœias, and designed especially to illustrate the Pharmacopœia of the United States; and

3. A copious Appendix: embracing an account of all substances not contained in the official catalogues, which are used in medicine, or have any interest for the physician or apothecary. By GEO. B. WOOD, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania, etc. etc.; and FRANKLIN BACHE, M.D., Professor of Chemistry in the Jefferson Medical College of Philadelphia, etc. etc. Eleventh edition, much enlarged. One vol. 8vo. $6.00.

This work has been thoroughly revised, with many alterations and additions, so as to bring it fully up to the level of the present state of materia medica and pharmacy. It embraces the substance of the recently revised United States and British Pharmacopœias, with a commentary on all that is new in those publications. Nothing, indeed, has been omitted in the revision which could render it worthy of the confidence it has enjoyed.

Morton's Human Anatomy. An Illustrated System of Human Anatomy, Special, General, and Microscopic. By SAMUEL GEORGE MORTON, M.D., author of Crania Americana, Crania Ægyptiaca, etc. With three hundred and ninty-one engravings on wood. One vol. 8vo. $4.50.



Posterior View of the Lungs, from Bourgery.

Dr. Morton's reputation as a man of profound science, great ability, and untiring energy, has been recognized not only in America, but in Europe, for the last twenty years. His "Crania Americana" and "Crania Ægyptiaca" have given him a world-wide fame. His anatomy is one of his latest works, and in it he has availed himself of all the interesting and important discoveries in anatomy which have been recently made. The work is published in splendid style, and the engravings were all executed under the careful supervision of the author.

J. B. LIPPINCOTT & CO., Publishers,
22 and 24 North Fourth St., Philadelphia.

THE

MEDICAL AND SURGICAL REPORTER.

Whole Series, No. 284. PHILADELPHIA, MARCH 29, 1862. New Series, Vol. VII. No. 26.

ORIGINAL DEPARTMENT.

LECTURES.

Lectures on Orthopædic Surgery.

Delivered at the Brooklyn Medical and Surgical Institute.

By Louis Bauer, M.D., M.R.C.S., Eng.,
Professor of Anatomy and Clinical Surgery, etc.

MALPOSITION OF THE KNEE-JOINT FROM BURSAL DISTENTION.

Bursitis, as the remote cause of malposition of the knee-joint, has, heretofore, been entirely disregarded. Cases of this kind may not be numerous, but they are certainly very intricate, and not rarely baffle the most sagacious and skillful surgeon.

Not every bursitis, in the vicinity of the knee-joint, is alike capable of exercising the same prejudicial effect upon its position. The so-called housemaid's knee (Hygroma patellare) may acquire a considerable size, without disturbing in any material degree the position of the articulation. Inflammation and distention of the slides at the tendons of the hamstring muscles are equally ineffective, in as far as the position of the knee is concerned. But if the subcrural bursa is affected and greatly extended by an excess of its secretion, the mechanical consequences are very great. It will be remembered that the aforesaid bursa is placed in close approximation to the knee-joint in front of the femur, and designed to facilitate the movements of the quadriceps muscle. Sometimes there is a communication between the articular cavity and this bursa, which tends to enhance the pathological importance of the latter. In each anatomical relation the inflammation of the one may easily extend to the other, and the copious collection of fluid in the joint may be forced into the bursa, and vice versa. The extraordinary cases of hydrarthrosis of the knee, mentioned by Dupuytren, Boyer, and others, not unlikely implicated the subcrural bursa, which may be deduced from the extent of the swelling in front of the thigh.

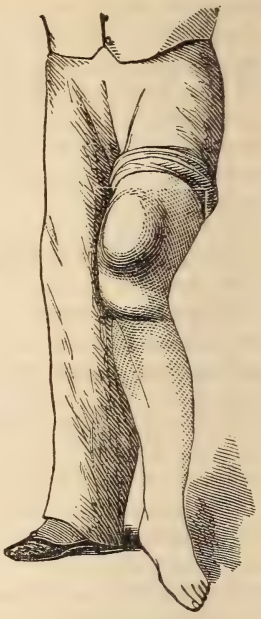
If, however, the *completely isolated* bursa should be the seat of subacute inflammation, and become distended by a large quantity of fluid, as we have observed it in two instances, the bursa is converted into a roll that raises the quadriceps off the femur, displacing it laterally, at the same time changing the direction and effects of its action. This is more readily the case when the bursal sac has become thickened by the morbid process, and distends chiefly in one direction. It assumes, then, the shape of a hemisphere, with its broad base firmly attached to the periosteum.

While the quadriceps acts over this as over a pulley, its physical power is greatly enhanced by this mechanical arrangement. But the increase of its power is the very reason why it gradually slides into a lateral position on the outer aspect of the thigh, drawing the patella along toward and upon the external condyle of the femur, still deriving mechanical advantages from the bursal tumor. By this shifting of the muscle the quadriceps becomes *acting flexor* of the leg, and its lateral location has the simultaneous effect of *inflexing the knee toward the other extremity.* The remote consequences may be easily realized. The extremity, being bent and knock-kneed, is thrown out of its perpendicular, the internal lateral ligament of the knee-joint has to bear the weight of the body, and becomes inflamed and excessively painful; the inflammation extends over the joint, adhesions of the articular faces ensue, and the member becomes, at last, useless for the purpose of locomotion.

There is yet another peculiarity in such cases that well deserves to be mentioned, namely, the *extraordinary hardness* of the bursal tumor, so as to simulate bone itself. This very hardness it is that often misleads the best surgeons to an erroneous diagnosis, and deprives the patient of the chances of relief. The following history of a case of this kind that came under our charge will exemplify the difficulties with which the like cases are surrounded, and the treatment pursued will serve as a guide in similar maladies: The patient (Peckner) was a young man, twenty-two years of age, when, three years ago, supported by two crutches, he limped into our office. Although of tolerably strong frame, he appeared much reduced in weight, greatly debilitated in vital powers, with a pallid and melancholic countenance. The marks of intense and protracted suffering, mixed with utter hopelessness, were deeply engraved upon his physiognomy; both from the constant pain and the deformity of his extremity. The patient related his case in the following words: "At the age of eleven I received an injury upon my left knee, which troubled me for three successive years, without, however, depriving me of locomotion. At that period, my father, a sea-captain, took me on a voyage for the benefit of my health. At sea I had repeated falls, not unlikely concerning also my weak joint. One day I was engaged in driving nails, the hammer slipped, and gave me a hard blow in front of my thigh, right above the left knee. The pain I experienced at the time was keen, yet tolerable, and, at any rate, bore no comparison with the agony that ensued very soon after. Moreover, my knee swelled considerably, assuming, at the same time, a bent and knock-kneed form. I cannot place the affected leg upon the ground without the most intense pain at the inner side of the joint and upward, and I have, therefore, to swing it with the aid of crutches. In touching my leg accidentally, and during sleep, when I turn in bed, the agony is great and almost unbearable. During the eight years that I have been an invalid, my father has taken me to, at least, a dozen surgeons of high repute, both in Europe and the United States, and their conjoint advice was 'amputation.' I could not familiarize myself with the idea of becoming mutilated, and despite the unanimous professional advice, I still nurtured the hope of attaining relief without loss of limb." The patient concluded his dismal history with the laconic question, "Can you cure me?"

The photograph which we invite you to inspect gives an accurate representation of the deformity of the patient, Fig. 30. You notice in front of the

Fig. 30.



left thigh, close to the knee-joint, an oval, circumscribed, and prominent tumor, $9'' \times 4''$ in size. Said tumor presented a smooth surface, a broad base, and everywhere the same hard, unyielding surface. It seemed to be made up of bony material. There was no discoloration nor tenderness observable, nor could the tumor be moved at it base, whereas the integuments could be readily shifted. The only tender spot of the affected extremity was at the inner aspect of the knee-joint. The latter was anchylosed by fibrous bands, allowing still a moderate mobility. The biceps femoris was contracted; the leg was rotated outward at the knee-joint, and the toes had thus become everted. The entire extremity was moderately attenuated. This completes the picture of the case.

One thing seemed to be certain, namely, that the tumor was accountable for the existing deformity, and that the latter was to be identified with the mechanical effects of the lateral displacement of the quadriceps muscle. The other symptoms characterizing this case could be readily accounted for as the remote consequences of the existing mechanical derangement. The inflammation of the knee-joint might have ex-

ceeded the limits of fibrous adhesion but for the timely suspension of its use. But what was the nature of the tumor, and was it susceptible of removal? That was the all-important question.

The apparently hard texture of the morbid growth suggested bony structure. Was it an osteoid? We thought not. Because the patient exhibited no *cachectic* signs. In his family no *hereditary* taint could be traced. Nor could the long existence of the tumor be reconciled with a cancerous neoplasm. Above all, the growth was *too firm* for osteoid.

Was it a periostosis? This diagnosis, though otherwise plausible, could not be adopted, on account of the regular form and the extent of the tumor, chiefly in one direction. Moreover, periostosis was certainly incompatible with the broad basis of the growth, instead of encircling more or less the entire femur.

Was it a bone abscess? No! the bone would have distended its walls in all directions, and become rarified and soft by such a size.

It might be sarcoma or fibrous growth but for the hardness, smoothness, regularity of form, and its scanty endowment with vessels. We admit, however, that neither of those differences would be decisive in differential diagnosis, as we now understand the pathological condition of the case, for the same mechanical influence that gave the hard feel to liquid is likely to produce the same effect upon semi-solid structure.

The evidently traumatic cause, the gradual increase, the regular form of the tumor, and the anatomical region pointed directly and conjointly to the distention of the subcrural bursa. Yet there was no fluctuation, and that ominous hardness was left unaccounted for. Nothwithstanding the discrepancy, we commenced most carefully to explore our ground, with the hope of detecting fluctuation; for the rather indefinite supposition suggested itself, that *the resistance of the vagina femoris* might both render the tumor hard and obscure its fluctuation.

At the inner and lower aspect of the growth, a branch of the saphena magna perforated the aponeurosis and dipped into the depth. There we felt some elasticity and very indistinct fluctuation, sufficient evidence of fluid, at any rate, to warrant explorative puncture. The patient, a very intelligent young man, having realized the probable character of his case, and deriving new hope from the proposed proceeding, readily consented to the exploration.

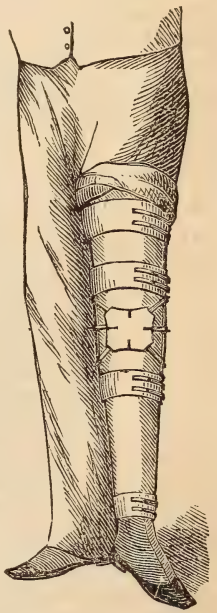
After having made the necessary preparation, we proceeded next day, with some of our professional friends, to the patient's dwelling. We must confess that we met with but little encouragement for the operation, either on the part of our colleagues or the relatives of our patient. The former *dissented* in toto from our suggestive diagnosis, and the latter presented the authority of the best surgeons of the country as objection to any other proceeding short of amputation of the thigh.

The trocar being inserted, about ℥xiv of a straw-colored and alkaline fluid was withdrawn, whereupon the tumor collapsed. On careful examination, the empty sac and its contours could still be discerned; but, of course, the previous hardness had entirely vanished.

Having thus verified our diagnosis, we proceeded with the second part of the programme, *in dividing the outer hamstring, breaking up all articular adhesions, and in fully extending* the extremity. A few minutes served to change the condition of the patient, and infused him and his friends with new hopes for the future. It could hardly be anticipated that pressure alone would suffice to prevent the reaccumulation of the bursal fluid. In order to close up the old depot, we were induced to inject tincture of iodine.

That operation was followed with violent inflammation and suppuration of the bursa. When, at last, the cavity had closed, the quadriceps muscle was so firmly agglutinated to the thigh-bone that it seemed indifferent whether the articulation of the knee-joint was re-established or not. The patient, desirous for active life, declared himself quite contented with a straight, useful, and painless, though inflexible extremity, with which he is now able to walk his forty miles a day.

Fig. 31.



The presented photograph, Fig. 31, is the appearance of the patient at the discharge from our treatment. At that time, we supported his extremity with a straight apparatus, with which the patient now dispenses.

That the hardness of the tumor was simply caused by the constraint and resistance of the vagina femoris, will be admitted without further dispute. And we noticed the *same symptom* in the case of Mr. A., one of the great hotel proprietors of New York. We need hardly say that the correct diagnosis of Mr. A.'s case depended likewise on correct discernment of the tumor, about whose character and structure conflicting opinions and apprehensions had been advanced. We were fortunate enough to aid in the diagnosis, and to contribute an indirect share to his relief.

PARALYTIC CONTRACTION OF THE KNEE-JOINT.

This subject will occupy our attention but for a brief space of time, having already, in a previous lecture, advanced the general physiological and pathological principles appertaining to motor paralysis; the symptoms of which are so uniform that the special parts affected make very little difference.

The more common paralytic deformity at the knee is that of flexion, although combinations with ad- or abduction are observed. The degree of flexion varies greatly from a slight deviation to an acute angle, so as to bring the foot in contact with the nates. It is not often that we meet with this simple deformity; it mostly appears in conjunction with others in the same or both extremities, from the hip downward to the toes. Distortions of this kind deprive the patient completely of not only locomotion, but constitute an unsightly appearance. Fortunately they are not very frequent, although they may be seen in large cities in quite a good number, where they collect for the purpose of invoking the sympathies of the charitably disposed. For this reason, they are exaggerated by artificial appliances. In New York, and still more in London and Paris, these wretched individuals may be seen on the sidewalk, walking on their hands and buttocks, while their legs, thin as broomsticks, are buckled to their thighs.

Most of these cases commencing in early childhood, and depending on maladies of the nervous centers—more especially of the spinal cord—spontaneously and gradually improve. Sensation may return, and the non-contracted muscles may resume their motor office; but the contractions remain, and with them the attenuation of the extremities and their arrested growth. The symptoms attending these cases depend, of course, more or less on the degree, extent, and duration of the paralysis. If the motor paralysis be complete, and of long standing, the extremity is shriveled to almost nothing; its contours are destroyed, and its circumference may be reduced to little more than that of the bones. The condyles and epiphyses protrude; the skin is wrinkled, flabby, cold, dry, and mottled; the paralyzed muscles seem to be almost annihilated, and the contracted ones appear like tense cords between their respective points of insertion; the deformity is in accordance with the group of muscles contracted. Thus if the adductor muscles of the thigh be contracted, the extremities are firmly pressed against each other, impeding thereby the discharge of urine, and, in females, the menstrual flow, producing constant excoriations at the groins. If the flexors of the thigh be likewise implicated, the limbs are drawn up, the knee approximating the face. If talipes equinus be coexisting with contractions of the knee-joint, the plantar surfaces of the feet are pressed against the nates, etc. Modifications in the deformity are numerous, and may be easily imagined. The only muscles which are exempt from the paralysis of the lower extremities are the psoas major and the illiacus; perhaps, from the fact that at least one of them derives its nervous endowment from the lumbar nerves. Their physiological integrity is exceedingly valuable for locomotion by the aid of artificial appliances.

The bones are, for the most part, retarded in their development, their epiphyses being rather smaller, notwithstanding their protrusion. Occasionally we find the bones bent, and their articular surfaces altered, as the necessary consequence of a persistent muscular traction and position.

The prognosis of the like cases is self-evidently a bad one. If it be already impossible to relieve the central disease after a long existence, it is alike impossible to re-establish the muscular structure which has become deteriorated into adipose or fibrous tissue. Nor can we, in any way, influence the arrested growth and development of the limb. All that art can do for such cases is the relief of the existing contractions by tenotomy, bringing the extremities into a straight position. This should be distinctly understood, and no encouragement held out beyond that.

After the extremities have been straightened, an apparatus may be affixed to the body, commencing with a belt round the pelvis, and a straight brace down to the foot firmly fixed to a

boot. The limb, of course, is to be fastened to the brace by transverse bands. With the aid of crutches, the patient may use his extremities to a moderate degree. If, however, the muscular structure be only in part paralyzed, the apparatus may be made with joints, and supplied with India-rubber bands longitudinally fixed, to be used as muscular substitutes.

Whether extension should be employed previously to the application of mechanical means, or whether the local treatment of the paralysis should be resorted to, depends entirely on the feature of the case. At all events, while using the mechanical appliances, the limb should be kept warm by a flannel bandage or worsted stocking, and carefully protected against chafing.

To be continued.

COMMUNICATIONS.

The Insertion of the Capsular Ligament of the Hip-Joint, and its Relation to Intra-Capsular Fracture of the Neck of the Femur.

By Geo. K. Smith, M.D.,

Demonstrator of Anatomy in the Long Island College Hospital, Brooklyn, New York.

DISCUSSION UPON THE FOREGOING PAPER IN THE SURGICAL SECTION OF THE NEW YORK ACADEMY OF MEDICINE. DR. JAMES R. WOOD, CHAIRMAN.

Stated Meeting, January 24, 1862.

Dr. George K. Smith, in replying to the remarks made at a previous meeting by Prof. Post, commenced by quoting the following from that gentleman:—

"The fifth proposition seems to me to be founded on an error, or at least on a statement which has not been demonstrated to be a fact. The statement to which I allude is this: when the cervix femoris has been fractured, and the fragments have reunited, and the cervix is found on post-mortem examination to be shorter than that of the opposite side, the absorption to which the shortening is due preceded the union of the fragments. It appears to me more probable that the union in such cases takes place in the first instance, and that the interstitial absorption is a subsequent event. This view would seem to be supported by the fact that before union has taken place the fragment connected with the head of the bone has a very imperfect supply of the veins or lymphatics through whose agency the absorption would be likely to occur."

It is very true that the fragment of the neck attached to the head of the bone is, to a great degree, deprived of its arteries and veins by the accident. If the force of the blow producing the fracture be sufficient to rupture the cervical ligament, and separate the fragments, the upper fragment is then supplied with blood by one, and in some cases two small arteries, which pass through the ligamentum teres to the head of the bone. The elements of nutrition being thus imperfectly supplied to this fragment, we infer that it will be absorbed with greater rapidity than the femoral fragment, which, after the fracture, has an abundant supply of blood. This will certainly be the case, provided that each fragment of the neck has a sufficient number of veins and lymphatics to accomplish its absorption. I have often examined that branch of the obturator vein which returns the blood from the head of the bone, and have usually found it about the size of a crow's quill; and while it is admitted that this is quite unequal to the number and caliber of the veins supplied to the femoral fragment of the neck, it must be remembered that *absorption through this channel is not held in check by the antagonistic force of an abundant nutrition.*

Prof. Post assumes, as a fact, that "before union takes place the head of the bone has also a very imperfect supply of lymphatics, through whose agency the absorption would be likely to occur." It appears that the minute distribution of the lymphatic system is yet imperfectly understood by anatomists. Some authors state that bone tissue is not supplied with lymphatic vessels, while others claim that it is. Cruveilhier states that

"Lymphatic vessels have not yet been actually demonstrated in the bony tissue but it is probable that they really exist there; at least the process of nutrition in bones and certain morbid phenomena which they present lead to the belief of their existence."* "Cruikshank, Sœmmering, and Bonamy have succeeded in tracing them into the interior of the bones."† "Lymphatic vessels are found in most tissues and organs which receive blood, but have not been detected in the substance of the brain and spinal cord, in the eyeball and labyrinth, nor the placenta and its membranes. The principal lymphatic vessels are more numerous than the arteries and veins, but very much finer. They are long, threadlike, transparent tubes of difficult detection, unless some colored substance is injected into them. The mode in which the lymphatics commence has been imperfectly ascertained, in

* Cruveilhier's Anatomy, p. 14.
† Pancoast's Wistar, vol. ii., p. 337.

consequence of the extreme tenuity and transparency of the vessels and the impossibility of injecting colored liquids in a direction opposed to the opening of the many valves which occupy the larger branches. For the most part they appear to originate in close capillary nets, intercallated with the sanguiferous capillaries, but having no communication with them."* "The lymphatics are found in nearly every texture and organ of the body, with the exception of the substance of the brain and spinal cord, the eyeball, cartilage, tendon, membranes of the ovum, the placenta, and umbilical cord. Their existence in the substance of bone is doubtful."†

If, from the conflicting statements of authors concerning this subject, we are led to believe that lymphatic vessels have not yet been discovered in the bony tissue, we are by no means at liberty on that account to deny that they really exist; for this summary method of disposing of the question would exclude further investigation, which might lead to their discovery.

Dismissing this point, we notice that Cruveilhier states that synovial membranes are abundantly supplied with lymphatic vessels, thus: the origin of the lymphatics can be shown only upon free surfaces, such as the mucous membranes, the skin, the serous and synovial membranes, and the lining membranes of arteries and veins. All the lymphatics arise by a net-work of such tenuity that when injected with mercury the whole surface appears changed into a metallic layer. The synovial membranes may be injected with the greatest facility, either near the cartilages where they are more tense than in other parts, or upon the ligaments to which they adhere.‡

If synovial membranes are thus abundantly supplied with lymphatics, it can hardly be doubted that there are lymphatic vessels in the ligamentum teres which may become active agents of absorption after fracture of the neck of the femur; since the ligamentum teres is enveloped throughout its extent by synovial membrane. Gray states that "the deep lymphatics accompany the deep arteries," and that "the lymphatics of any part or organ exceed in number the veins, but in size they are much smaller."

If now the lymphatics originate in accordance with Leidy's opinion, "in close capillary nets, intercallated with the sanguiferous capillaries," and pass in a direction from without inward, accompanying the arteries, we can see no good reason why that branch of the obturator artery which supplies the head of the bone with blood should form an exception to the rule. With our present imperfect knowledge concerning the origin and distribution of the lymphatics, it appears to me that the statement of Prof. Post, that "before union takes place the head of the bone has a very imperfect supply of the veins or lymphatics through whose agency the absorption would be likely to occur," is a statement which requires further anatomical investigation before it can be admitted as a fact.

Whatever the agency may be by which the result is accomplished, absorption of the head and neck of the bone does actually occur, without any apparent attempt at union of the fragments; and the rapidity of the absorption is sometimes so great that nearly the whole of the neck has been known to be removed in less time than is required for bony union of this fracture. Thus:—

"The superior fragment of the broken cervix usually disappears to the level of the brim of the acetabulum, either in consequence of the action of the absorbent vessels, or by the friction of the broken surfaces, or perhaps it is due to a combination of both these causes. The absorption, however, sometimes extends much further; I have seen half of the globular head of the bone thus removed, and a case has been recorded in which the head of the bone was completely absorbed. * * * * In old cases the femoral fragment is likewise absorbed to a greater or less extent; sometimes it disappears entirely to its base, and the portion of the shaft from which, in its normal state, it springs, presents a smooth and even surface, limited by the trochanters and their connecting lines. * * * The absorption of the lower fragment is sometimes effected with extraordinary rapidity; in case No. 9, the shortening of the limb, which immediately followed the receipt of the injury, was only a quarter of an inch, but after the expiration of six weeks it amounted to one inch and a half; and in case No. 12, the removal of the greater part of the neck of the bone was accomplished in less than a month."*

Here we see the effect, and from the effect we infer the cause which produced it; for, although we may be unable to trace the immediate connection of cause and effect, we know that nature never accomplishes any purpose without employing means which are adequate to the ends produced. If after fracture of the neck the whole

* Leidy's Anatomy, p. 428.
† Gray's Anatomy, p. 425.
‡ Cruveilhier's Anatomy, p. 612.

* Smith on Fractures, p. 42.

head be removed by absorption, without any attempt at union of the fragments, we are forced to conclude that the supply of veins and lymphatics to the head of the bone is sufficient to produce this result, since it is through the agency of these vessels that absorption occurs, and we can therefore see no physiological necessity for the absorption of the neck to be preceded by bony union of the fragments. I would not, under any circumstances, knowingly put a wrong construction upon the language of any surgeon, but, if I correctly understand the following proposition of Prof. Post, it does not seem to me to be strictly in harmony with his criticism of my fifth proposition :—

"In intra-cervical fractures, whether bony union takes place or not, the cervix femoris becomes greatly shortened by insterstitial absorption, and, after the lapse of several weeks or months, the limb may be shortened to the extent of two inches or more."

Prof. Post states that in order to demonstrate the truth of my fifth proposition "it would be necessary to present a series of preparations taken from patients who had survived intra-capsular fractures for variable but known periods antecedent to union, and to show that there was a progressive shortening of the neck before the occurrence of union." It appears to me that it would be almost impossible to obtain such a series of preparations, since they must be procured immediately after union, else Prof. Post would claim that this shortening of the neck by absorption did not occur till after the fragments were united. They cannot be obtained till after the death of the patient, and it will seldom happen that a patient, whose vital powers are sufficient to secure bony union of a fracture of the neck of the femur, will die immediately after union has occurred. Again, if it were possible to procure such a series of preparations, they would not be likely to illustrate "a progressive absorption of the neck," since the whole of the neck is, in some cases, removed in a few weeks or months, while in other cases as many years will transpire with a portion of the neck still remaining. The following extract, from Mr. Howship's report of "cases of fracture of the neck of the femur,"* will exhibit this fact :—

"1. Age seventy-six; lived three weeks after the fracture; neck shortened half an inch; no union. 2. Age seventy-five; lived two months after the fracture; neck shortened three-quarters of an inch; slight fibrous union. 3. Age seventy-eight; lived five months after the fracture; neck still undergoing absorption. 4. Age sixty-six; lived five months after the fracture; the neck completely removed by absorption; firm fibrous union. 5. Age seventy-nine; lived ten months after the fracture; neck nearly absorbed, with no attempt at union. 6. Age seventy-nine; lived twenty-two months after the fracture; neck entirely gone; no union. 7. Age seventy; lived eight years after the fracture; neck nearly absorbed; firm fibrous union. 8. Age fifty; lived fourteen years after the fracture; neck about half removed by absorption; the fragments not united."

In the last case the patient was not as old by many years as either of the patients mentioned in the preceding cases, and this fact would suggest a more abundant nutrition of the fragments, which accounts, to a great degree, for the slower progress of their absorption. Since the last meeting of the Section I received a letter from Dr. Asa Horr, of Dubuque, Iowa, informing me that he had lately obtained a specimen of fracture of the neck of the femur. He gave a brief history of the case, with a description of the specimen, and said, that, if I should "regard the specimen as of any value to science," he would forward it to me on receipt of my reply. Through his kindness I am enabled to exhibit the specimen this evening. It is from a patient fifty-eight years of age, who died a little more than a year after the occurrence of the fracture. The fragments were not united. I have macerated the specimen, and you will observe that all of that portion of the neck attached to the head of the bone has been removed by absorption, while a portion of the neck, about half an inch in length, still remains attached to the shaft. The specimen is interesting as a further illustration of the fact that absorption after fracture of the neck does not proceed with any regularity, a given distance in a given length of time, but generally progresses with greatest rapidity in patients who suffer from this fracture at an advanced period of life, when the elements of nutrition are very imperfectly supplied.

It appears to me that the opinion of Professor Post, that "the union takes place in the first instance, and that the interstitial absorption is a subsequent event," is an opinion which necessarily involves the disastrous consequence of disunion of the fragments, as one of the results of such absorption, since parts newly formed are more readily attacked by absorption than those

* Medico-Chirurgical Review, (New Series,) vol. xxiv. p. 102.

of longer standing; and we must, therefore, expect that the callus by which the fragments were united will be first attacked, and that its absorption will result in disunion long before the whole of the neck shall have been removed. The following is interesting as an illustration of this point:—

"The callus is subject to *softening*, disintegration, and absorption, if not also to the fatty degeneration. * * * Occasionally the absorption can be distinctly traced to the inordinate use of mercury, carried to profuse salivation; or it may be owing to a syphilitic taint of the system, especially when this affection has reached its third stage, in which the bones and periosteum are so constantly and often so seriously involved. But the most common cause, perhaps, of all, is an impoverished and diseased state of the blood, from the use of improper food, and especially from the want of a sufficient quantity of fresh vegetables and subacid fruits. The influence of ill health arising from this cause upon the condition of the callus was strikingly exemplified in Lord Anson's voyage to the Pacific Ocean, in which many of the crew suffered severely from scurvy. It was noticed that those who had formerly had fractures were attacked with absorption of the callus, speedily terminating in disunion of the ends of the broken bone. Cicatrices, whether the result of the healing of wounds or of ulcers, experienced a similar fate, the parts breaking out into open sores, remarkably pale, languid, flabby, and difficult of cure. Similar effects are occasionally observed to follow attacks of typhoid fever and anæmic states of the system, however engendered."*

Professor Post further states:—

"The sixth proposition seems to me to involve errors, or at least unsustained hypotheses, more glaring than that which is objected to in the fifth proposition. The language which is employed by Dr. Smith in the sixth proposition seems to convey the idea that the main obstacle to bony union in intra-capsular fracture is to be found in the condition of the fragment connected with the shaft of the bone, and that when the portion of the neck between the fracture and the shaft has been absorbed, the obstacle to bony union is thus removed."

I confess that I am unable to see how the above inference can fairly be drawn from the language used. The following is the sixth proposition: Under favorable circumstances, fractures of the neck of the femur external to the capsule unite readily by bone; so also do fractures which are partly within and partly without the capsule, and it is highly probable that fractures within the capsule, which are followed by absorption, are sometimes united by bone, after the process of absorption has reached a point external to the normal capsule where bony material is supplied; but this, if it ever does occur, can never be proven; for, if the line of union be partly without the normal capsule, it is impossible to determine that the fracture was entirely within it, and we can never be positive that bony union of intra-capsular fracture has occurred, until a specimen is presented in which the line of union is found to be entirely included by the normal capsule.

It is well known that bony union is of frequent occurrence in fractures external to the capsular ligament; but it appears to me that we are yet without positive proof that bony union has ever taken place entirely within the normal capsule. Numerous specimens have been exhibited as illustrations of such union; but in the great majority of these specimens the line of union is found to be within the capsule on the anterior surface of the neck, and external to the capsule on its posterior surface, with a portion of the neck still remaining attached to the shaft. Professor Mussey's cases are examples of this kind, and Professor Parker's specimen illustrates the same point. These specimens represent, without doubt, one or the other of two conditions; there has been either bony union of a fracture partly within and partly without the capsule, in which the shortening was mainly at the expense of the fragment attached to the head; or bony union of the fracture which occurred entirely within the capsule, in which union did not take place until absorption had reached a point which was external to the insertion of the capsule on the posterior surface of the neck; and it is impossible to determine the class to which either of the given specimens may belong. The posterior insertion of the capsule is usually near the middle of the neck, and a transverse fracture a little external to this point will be within the capsule on the anterior surface of the neck, and without the capsule on its posterior surface. It is plainly indicated in the sixth proposition that such a fracture is, under favorable circumstances, sometimes united by a bone; also that a fracture at any point between this line and the shaft of the bone is united in like manner, and we are at a loss, therefore, to determine how it is that—

"The language which is employed in the sixth proposition seems to convey the idea that the main obstacle to bony union in intra-capsular fracture is to be found in the condition of the

* Gross's System of Surgery, 1st edition, vol. ii. p. 145.

fragment connected with the shaft of the bone, and that when the portion of the neck between the fracture and the shaft has been absorbed, the obstacle to bony union is thus removed."

Professor Post states :—

"I conceive the principal obstacles to bony union in intra-capsular fractures to be found in the condition of the fragment connected with the head, which, having no supply of blood-vessels except those which are conveyed to it by the ligamentum teres, does not receive sufficient nourishment to secure its union by bone with the other fragment."

Many reasons have been given for the constant failure of bony union within the capsule; but it appears to me that none have been given which are altogether satisfactory. It is true that there is a want of due nutrition of the fragments in patients who meet with this fracture at an advanced period of life; but we find the same failure to unite within the capsule, if a patient is the subject of this fracture in youth or middle age. In old age the function of nutrition is but imperfectly performed, and the weight of the body is, in consequence, gradually diminished by absorption, each of the different tissues being more or less affected by the slow decay; and it has been noticed that, for some reason which has not yet been fully explained, the neck of the femur is more seriously affected by this process than other parts of the skeleton. In this fact we see the reason why a fracture of the neck of the femur which is the result of a severe injury, and is of the rarest occurrence in youth, is frequently met with in old age, and often as the result of a most trivial injury. This atrophy or absorption of the neck is, then, the exciting cause of the fracture, and its progress, after the fracture, is seldom, if ever, arrested until a great part or even the whole of the neck has been removed. Malgaigne holds that the destructive absorption of the neck, which follows a fracture within the capsule, is incompatible with bony union. After a careful review of the reports of post-mortem examinations of fractures within the capsule, it appears to me that the materials provided by nature for the uniting callus in this situation are in many cases entirely removed by absorption, leaving no appearance of an attempt at union; and that in those cases in which the callus is not thus removed, it is arrested in its development, forming, in some instances, a kind of semi-cartilaginous material, rounding off the extremities of the fragments, and in others, a firm fibrous union which does not become fully developed into bone. Sir Astley Cooper states that, in recent cases, the capsule is found to be distended with a mixture of serum, synovial fluid, and blood, which—

"Is produced by the inflammatory process, and becomes absorbed when the irritation in the part subsides. I do not know the exact period at which this change takes place, but I have seen it in the recent state of the injury."*

With regard to the new classification of fractures of the neck proposed by Professor Post, it seems to me that it will render the "vexed question of osseous union within the capsule" more difficult of solution than it will be with the classification now in use. He proposes—

"To make a new classification of fractures of the cervix femoris, dividing them into two classes, viz.: fractures between the caput femoris and the inter-trochanteric lines, and fractures at the inter-trochanteric lines extending more or less into the shaft of the bone. I propose to call the fractures of the first class *intra-cervical*, and those of the second class extra-cervical. I think that these two classes of fractures will be found to correspond very nearly with those which have hitherto been described as intra-capsular and extra-capsular."

He divides "*fractures of the cervix* into two classes;" but the class of intra-cervical fractures, representing fractures at any point between the head of the bone and the inter-trochanteric lines, includes all possible fractures of the cervix, and hence his extra-cervical fractures cannot properly be spoken of as fractures of the cervix, and do not, therefore, correspond in any degree with fractures hitherto described as extra-capsular, in which the line of fracture traverses the portion of the cervix included between the insertion of the capsule and the inter-trochanteric lines. The greatest objection to the classification is found in the fact that an *intra-cervical* fracture, which Professor Post thinks will be found to correspond very nearly with an *intra-capsular* fracture, may be either an *intra-capsular* fracture, an *extra-capsular* fracture, or a fracture partly within and partly without the capsule. This fact is important when we consider that these several fractures included under the name of *intra-cervical* differ widely from each other, bony union being of frequent occurrence in a fracture external to the capsule, occasionally seen in a fracture partly within and partly without the capsule, while it has not yet been satisfactorily demonstrated that bony union has ever occurred entirely within the

* Cooper on Dislocations and Fractures of the Joints, p. 145.

capsule. It is highly important, both in a scientific and a medico-legal point of view, to know whether we can ever expect bony union of a fracture entirely within the capsule. If not, the surgeon who faithfully performs his duty, and fails to secure bony union of this fracture, can summon to his defense, when unjustly arraigned for malpractice, the scientific fact that a fracture within the capsule is never united by bone. Professor Post states that "in intra-cervical fractures bony union very rarely occurs," and he tells us that an intra-cervical fracture will be found to correspond very nearly with an intra-capsular fracture. If from this we are to understand that bony union of an intra-capsular fracture does occasionally occur, we think that he requires us to admit as a *fact* that which surgeons have labored for fifty or a hundred years, and failed to prove. I do not deny the possibility of bony union within the capsule, but simply think that the evidence furnished in proof of such union is not sufficient to establish it as a fact, and that further investigation is needed in this direction.

To be continued.

Medical Societies.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

Reported by William B. Atkinson, M.D., Recording Secretary.

November 13th, 1861.

VARIOLA, ITS MODIFICATIONS AND TREATMENT.

Dr. Nebinger would premise by remarking that he had taken no little interest in the treatment of small-pox. If there is any one disease to which he had given more deliberate consideration than another, that disease is variola. This greater consideration certainly had not arisen from any special pleasure he found in coming in contact with so disgusting and loathsome a malady, but had perhaps its cause or incitement in his sympathies being largely aroused for the patient, because of his isolation from relatives and friends, and the offensive and forbidding character of the disease, especially when it presents in the confluent form—then the most terrific of all the exenthemata.

The petechial form of variola, which should be called malignant, the form in which the vesicles fill with blood, or rather with bloody serum, he had seen, but had never been able to cure, and felt confident that attacks of this form of the disease always prove fatal. The confluent type of the disease is the next most formidable, but is not necessarily fatal; although, under the best management, it will march on to a fatal termination. The gentleman (Dr. Bell) who opened the subject remarked, in regard to the confluent variety of small-pox, that the large majority of all thus attacked die; in this declaration he is in harmony with all writers and authorities upon the disease. Yet, while this declaration is true, as far as the experience of those are concerned who treat variola after the style and fashion, the manner and form of our dead, and yea, some of our living fathers in medicine, he would remark with due and becoming respect and exalted consideration for these, the past and present, that so far from the large majority of his confluent small-pox patients dying, the majority recovered. But then he did not treat small-pox as it has been and is generally treated, or as the books and authorities recommend. His plan of treatment was, in the main, not only different, but vastly different, from that taught by the books and practiced by the profession. To this treatment he had called the attention of the profession more than once, and he was happy to say that he had met with some very gratifying responses from those who had had the courage to step aside from the old, too-well beaten and too-oft trodden track, to venture upon the new and better one. What is the nature of confluent small-pox? The correct answer to this question will give the only true indications for treatment of this form of variola. What, then, is confluent small-pox? It is a disease in which the patient's body is wrapped up, as it were, in a thick sheet of pus, and in which there is nearly a complete destruction of the external covering of the body and part of the cellular tissue beneath the skin. Dr. Watson says, the quantity of pus generated amounts to quarts. This is, doubtless, true. In the pustules, when fully developed, the pus exists in a semi-concrete or highly condensed form; but little more than the solid constituents of the pus being present, in consequence of the liquid constituent having, as the pus was being developed, evaporated or passed out of the pustules by exosmotic action. Thus, then, the variety of the disease under consideration is one in which nearly the entire skin and part of the subjacent cellular tissue are destroyed, and quarts of pus are generated. With these facts before us, and duly reflected upon, it is self-evident that great exhaustion must necessarily result. How shall we first assist the organism in developing the quarts of pus with as litte exhaustion as possible, and this done, next enable it to reproduce the destroyed tissues? The only rational answer is, by generously sustaining the patient. But what, under the circumstances, constitutes a generous support? Will you say bread and tea, cracker, panada, water-gruel, tapioca, and arrow-root? He knows that this is the diet generally of small-pox patients, no matter how severe and exhausting the attack; or rather, he would say, that such was the diet until the patient had reached, or nearly reached, a fatal exhaustion, when milk-punch, beef-tea, and such

food are directed, and then too often presented either too late or in too small quantities for the safety of the patient. Bread and tea, water-gruel, and panada will not, even though you could induce the patient to partake freely of such diet, meet the requirements of an economy being exhausted in the manner he had referred to. The necessities of the system are great, and can only be successfully met by the introduction of the highest order of aliment, and that in large quantities. He had heard but recently of a case of confluent small-pox; the patient was an adult male, who was restricted to three glasses of milk-punch per day—the doctor in attendence declaring that a greater quantity would be injurious! For one moment reflect upon that. Three glasses of milk-punch in twenty-four hours, for a man covered from head to foot with pustules, the whole surface of his body being destroyed, and the necessity existing for its reproduction; and yet those pustules were to be perfected and the whole surface of the body to be reproduced out of three glasses of milk-punch per diem! Need he say that sloughing of the skin and cellular tissue took place, and that the patient died? No, he need not. You must know that, under such treatment, no other result could follow. "Three glasses of milk-punch, and three only; more would be damaging." Why, if a well man was permitted to take as his only food but three glasses of milk-punch every twenty-four hours, he would in a short time starve to death on it. Yet, gentlemen, this is the treatment given to confluent small-pox patients. Is it wonderful that the great majority die? But a few weeks ago, he was called to see a woman laboring under an attack of confluent small-pox, who had been treated by another physician. He found her so exhausted that she could not reply to his questions in tones audible enough for him to hear. She was so exhausted that she could not sustain her head upon the pillow in a line with her body, it falling from the pillow and approximating the bed. The skin on her face and arm in many places was sloughing, and he could, with but a slight effort, have stripped the arms of the skin, such was its condition. This woman was living—no, not living, dying—on toast and water, arrow-root, and gruel. He at once ordered her egg-nog, and set the time it was to be given and the quantity. He did not order but three glasses in twenty-four hours, under the impression that more would be damaging; but he directed her to be given a glass every two hours. On his second visit, which was about twenty-four hours from the first, improvement was manifest: she was able to speak so as to be heard, and was able to sustain her head upon the pillow. Between his two visits she had taken twelve glasses of egg-nog. Do not, at this announcement, be frightened from your propriety. This treatment was continued day after day, until she was able to take other food. And under this, as some would and have called it, extraordinary nutritive treatment, recovered. The proof of its utility is found in its results. Try the treatment. Put it to the test before you pronounce judgment upon it. Be assured it is worthy of a trial.

He had recently treated a lad of seventeen years, who had a most exhausting attack of confluent small-pox. In the house with him were four others who had the disease in the distinct form. The lad referred to did not come into his hands until the fourth day of the eruption. He was delirious — his delirium closely resembling the ravings of mania a potu. He had not slept for forty-eight hours, and it was with much difficulty he could be restrained and confined to his bed. The doctor succeeded in controlling his delirium and produced sleep with opium. As it was evident from the extent of the eruption that the case would be a grave one, he commenced at once to sustain him by the free use of eggs and milk. This was continued for three days, when whisky was added to the eggs and milk — of this (the egg-nog) he was given as much as he could take. It was manifest to the doctor that those who were nursing the boy had concluded that he would die, and as the duty of taking care of him was a most disagreeable one, the impression that he could not get well had its bad effect of preventing the free administration of the nutriment. He felt a deep interest in the boy's recovery, and for the purpose of keeping his attendants from neglecting him, he visited the lad three and four times daily, while he was extremely ill, and upon each occasion gave him freely of egg-nog. This was one of the worst cases of small-pox he ever beheld. His eyelids were not separated for eleven days. The entire surface of his body was covered with the eruption. The skin in several places was gangrenous, and he became emaciated as he never saw a small-pox patient emaciated before.

Now this lad drank quarts upon quarts of egg-nog and milk, and yet with all this extraordinary nutrition, he became extremely prostrate, much emaciated, and had gangrene of the skin. What would have been the result if he had been given the water-gruel treatment? There cannot be any difficulty in determining. The patient, under high and free nutritive treatment, recovered, and he now lives to proclaim the utility of generous nutrition in confluent small-pox.

After the first three days, the period which precedes the eruption, medicine ceases to be, as a general matter, of any use. The great, the pressing indication is food, and it matters not what the food is so that the patient takes enough of it to meet the requirements of the economy. Dr. N. employs milk, eggs and milk, and egg-nog, not that there is anything of special importance about those articles of diet, only that they are as grateful to the patient as any food which can be presented, and give as little pain to the pustulated throat and mouth as any food which can be given. Yet, for the generous nutrition which he recommends to be of positive service, it must be commenced early. It will not

do to put off supporting vigorously the patient, until prostration begins to manifest itself—our nutrition then, be it ever so generous, may be without benefit. That the blood may be so sustained as to meet all the pressing wants of the economy, we must commence early. Commence immediately upon the papular stage closing and the vesicular stage opening. Passing from milk to eggs and milk, and from eggs and milk to egg-nog, as the pustules develop and the disease progresses.

Much stress has been placed upon what the books and teachers call the secondary fever of variola. He must enter his objection to this name, for the febrile disturbance which springs up during the development of the pustules, and subsequent to their development. He objected to the name because it is an improper one, and is well calculated to lead to false ideas of pathology and improper treatment. The fever should be called pustular, maturative, or irritative fever, as it would then express the cause, upon which its development and continuation depends. But what of this secondary, or irritative fever? Why shall we, as the books direct, withhold at this period generous diet from the patient? Will its absence diminish the fever? Or is it important to the safety of the patient that it should be diminished? Do we not desire that this fever shall be sthenic; and can we have it such, by allowing the blood to be exhausted by the demands made upon it to perfect the pustules? Certainly not. If we desire this fever to be vigorous, and the patient's condition not to become typhoid, we must sustain—I repeat we must sustain—the patient, and that most generously. A moment's reflection cannot bring us to any other conclusion than that it is an outrage of common sense, an outrage upon the patient, and a violation of the plainest teachings of pathology, to withdraw food from, or to refuse to give it, with an unsparing hand, because a fever exists as a phenomenon of the development of pus, or the maturation of almost innumerable pustules. Do we not sustain well, in all other cases where pus is being developed to any large extent; and is not the practice justified by its results? Why, then, should we refuse generous dietetic support in that pustular disease in which, Watson says, as has already been remarked, quarts of pus are generated? No patient with confluent small-pox was, he felt confident, ever destroyed by a generous and abundant supply of food. He was equally as confident that many such now sleep the slumber of death because they were not vigorously sustained with food. The time for the management of grave cases of variola with water-gruel, toast-water, and panada, and for the secondary, or more properly the irritative fever, to be regarded as an opposing, a contraindicating phenomenon to the free introduction of food, is fast passing away. A better time for the poor, unfortunate small-pox patient is at hand.

Some one has said to-night that there had been no improvement in the treatment of small-pox since the days of Sydenham. He begged to be indulged in the declaration that this is not correct. In the days of Sydenham the starvation treatment, the gruel diet was the food, but although this treatment is still too largely practiced, he knew that it was not so universally followed as was the case a few years ago, and that there are those who, although they do not sustain their small-pox patients to the extent that he does, yet they repudiate the gruel and panada diet, and give food with a freedom that would appal Sydenham himself. The members are not unacquainted with the fact that his practice is not small, and that the field of his labors is in one of these localities in which Dr. Jewell has correctly stated that variola has been very prevalent. It cannot be that he should not have had a liberal percentage of these cases to treat, and yet he had but one case of death to occur, and that was a man whose habits were bad, and whose attack of confluent small-pox had been preceded but a few months by an attack of secondary syphilis.

Dr. Bell asked how many cases Dr. N. had seen in the late epidemic? Had he seen thirty?

Dr. N. could not say how many, but he presumed he had seen more; but this was a mere guess, as he had not any account of his cases at hand, from which he could make any positive assertion as to their number. But he was confident as to having had but one fatal case during this epidemic.

Dr. Bell. Then the doctor has been more fortunate than any physician yet.

Dr. N. remarked that many of his cases were light, and required but little treatment. But as regards being more fortunate than any other physcian, that, he presumed, might be accounted for by the other fact that but few sustained their small-pox patients as generously as he did.

Dr. Jewell. How many were confluent cases?

Dr. N. As far as he could now call to mind, five were such.

Dr. N. said he had found much relief to his patients, from the burning and itching of the face, to follow from the use of an ointment made of lard and liquor sodæ chlorinata, in the proportions of one ounce of the lard to two drachms of the solution of the chlorinated soda. This he directs to be freely applied to the face at short intervals.

Dr. Carson asked if he had employed glycerin.

Dr. N. He had not.

Dr. Burns, after thirty-five years' experience, could fully agree with Dr. Nebinger. For many years, after the period of excitement had passed, he had stimulated freely. There is a great waste of vital fluid, and the patient requires sustaining. Hence he gave beef-tea, punch, etc. The last epidemic had been one of the most violent character, and required early and free nutrition, and with satisfactory results. For twelve years he had employed iodine externally. At the period when pustulation was commencing, he applied the tincture of iodine in its full strength, and then painted with collodion, repeating it every day. The inflammation is thus controlled, and the

air is prevented from acting on the skin. Small pits are left, which, in a few months, disappear. He had tried it in a case on one hand, leaving the other naked, and there was a marked difference.

Dr. Remington was happy in being able to add his testimony in favor of the stimulating nutritive treatment pursued in the advanced or suppurating stage of *confluent small-pox*, and so highly eulogized by our friend, Dr. Nebinger. He had been called upon to treat a most aggravated case in its confluent form, early last spring, occurring in a young man, aged about twenty years, and said to have been vaccinated some five years since, *homœopathically*. Hemorrhage from the bowels supervened on the twelfth day of the disease, which, in a few days, yielded to the *tinct. ferri chloridi*. This formidable case was also attended with *delirium, stupor, intense suffering*, great intumescence of face, and soreness of the scalp, with entire closure of the eyelids for a week or ten days. Circumscribed sloughs of the cutis appeared, and on the maturation of the pustules, which coalesced on the face, and formed a regular incrustation of half an inch in thickness, giving rise to an intolerable fetor, notwithstanding powerful disinfectants of *chlorinated soda* and glycerin were freely employed. There were positive symptoms of great prostration present, and this exhaustive drain, by so extensive a suppurating surface made on the powers of life, was compensated by the liberal exhibition of eggs, custards, jellies, with brandy, milk-punch, essence of beef, mush and milk, ice cream, and oysters.

The patient's eyes escaped unharmed, although his hair fell off, and his hearing was greatly impaired for some months. He had since learned that he has completely recovered from both these annoyances, and enjoys a full return of vigorous health.

There did not appear to be any extension of the disease, as he took the precaution to vaccinate immediately every member of the family supposed to be susceptible of the disease.

He should have been gratified had the gentleman who preceded him this evening enlarged on some of the fatal and more frequent complications of *variola*, and particularly that grave and dangerous complication with utero-gestation.

He must candidly admit that so far as his experience goes the result has been invariably disastrous, whether a miscarriage has happened, or a delivery at the full period, while the woman was suffering from an attack of variola.

It is quite evident to the practical observer that medicine has but a very limited control over this loathsome scourge, and therefore our chief duty consists in restricting its extension by interposing vaccination; employing moderate evacuants by salines in the commencement, a properly regulated, cooling regimen, and free ventilation, followed, in the advanced and suppurating stages, with a generous, nutritive, stimulating diet.

Adjourned.

Illustrations of Hospital Practice.

PENNSYLVANIA HOSPITAL.

SURGICAL CLINIC.

Service of Dr. Pancoast.

March 15, 1862.

A NEW OPERATION IN HERNIA.

This was the case of a man far advanced in life, who had just entered the hospital to place himself under surgical treatment for an incarcerated scrotal hernia. Efforts had been made by the usual appliances of warm bath, etherization, etc. to reduce it, but without avail. There were none of the extreme symptoms usually present in strangulated hernia, and the diagnosis was therefore made of incarcerated hernia with stricture at the external abdominal ring. An operation was decided upon, and the lecturer took occasion in his clinical remarks to speak of an entirely new operation, of which he believed he was the originator, and the only surgeon who had performed it. It was the division of the stricture by subcutaneous incision, on essentially the same principle as that for division of the tendo-Achillis or the soleus muscle, for the cure of talipes. He had performed this operation in several instances and with the most satisfactory results, curing the patient in much less time than is required by the usual operation, in some instances requiring the patient to lay by only a day. But it is only applicable to those cases where the stricture is at the external ring, and this should always be borne in mind. This case being one of those in which this operation was applicable, it was performed in the following manner: A grooved instrument was first introduced some distance below the stricture, passed under the skin and fascia, and into the external ring, so as to raise it upon its point; the director being kept entirely outside of the sac. A common bistoury (though that instrument is too much bent at the point to be an appropriate one) was then *held firmly* with its back upon the grooved director, and then raised up, so that its point should pass into the groove of the director through the integuments, just below the stricture. By rocking the handle of the bistoury backward, the point slid along the groove to the seat of the stricture, dividing it. Great care is necessary to avoid wounding the bowel, which lies very close to the knife, while if properly performed it is less dangerous than the ordinary operation. The hernia was then readily reduced, and a bandage and compress applied to prevent its return. The operation was neatly and quickly performed, and the case is at this date progressing finely.

RACHITIS—CONGENITAL.

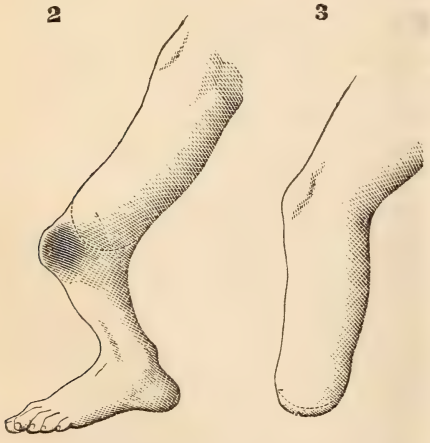
This case was that of a young man, nineteen years of age, a cripple from his birth, who came into the Hospital on the 14th inst. for the purpose of submitting to amputation of the leg,

with a view to the application of an artificial limb. He is a resident of Adams County, Ohio, was born in Kentucky, and is the only member of a large family of children which is deformed. His bodily health is good; never has been sick a day in his life, he says. His parents were both healthy; his mother is still living; and he appears very intelligent. He has never walked upon his feet, his only method of locomotion being upon his knees. His thighs are smaller than natural, but entirely sound, and these bones are evidently capable of sustaining the weight of his body. Below the knee the legs exhibit the appearance represented in the drawings, Figs. 1 and 2. The

1

right limb, Fig. 2, is the most deformed. The joints both of the knee and hip are perfect. Several times during his life he has attempted to walk

2 3



by the aid of crutches, but every effort in this direction has proved a failure, resulting, as he says, on as many as eighteen or twenty occasions, in the fracture of the tibia, and once of the femur, at the least slip of his foot or crutch. Neither tibia is well developed, the right being scarcely three-quarters of an inch in diameter, and the fibula of that leg is not larger than an ordinary-sized pipe-stem. A peculiarity of the case is that, although the bones are so easily fractured, yet the fractures heal kindly and speedily. The case is one full of interest in every point of view. The diagnosis is easily made. It has been a case of rachitis. The great anxiety of the young man is to be able to walk, and for this purpose it is proposed to amputate the right limb at the point designated by dotted lines in the cut, Fig. 2, which will give a sufficient stump for the application of an artificial limb, to be supplied by Mr. B. F. Palmer, of this city. With a full understanding of the consequences which may result from the operation, he is anxious to have it performed at once. Having been placed under the influence of ether, the limb was amputated by Dr. Pancoast expertly and neatly. He was assisted by Drs. Hewson and Hartshorne, surgeons of the Hospital. Great care was taken to render the stump a serviceable one for locomotion when the artificial limb should be applied, by clipping the protruding nerves and bringing the flaps aptly together, and firmly securing them by sutures. The usual dressings were applied, and at this present writing, March 24, is progressing finely toward a favorable termination, and has the appearance represented in Fig. 3. For the remaining limb, Fig. 1, mechanical appliances are to be made, also by Mr. Palmer, for the purpose of supporting and strengthening it, and it is confidently expected that the earnest wish of the young man will be gratified, and that in a few weeks, if no untoward accident shall occur, he will return to his home standing upright and walking as other men. This will be indeed a triumph of *surgery* and the *compensatory art*, and both the surgeon and the surgeon-artist will feel themselves amply repaid for their commendable generosity and benevolence.

EDITORIAL DEPARTMENT.

PERISCOPE.

Weekly Summary of American Medical Journalism.

By O. C. Gibbs, M.D.

CHLORATE OF POTASSA—ITS USE IN PHTHISIS, ETC.

In the *American Journal of the Medical Sciences* for October, Professor Austin Flint has an article upon the treatment of phthisis by the chlorate of potassa. Professor Flint reports fourteen cases of unmistakable phthisis, in which this remedy was put on trial. We cannot give his general conclusions in full, but subjoin the following:—

"Of fourteen recorded cases of phthisis in which

the chlorate of potassa was given in sufficient doses, (℥ss per diem in eleven, and ʒiij per diem in three cases,) and for a sufficient period to test its remedial power, in nine the histories afford no evidence of any salutary influence from the remedy; in four cases the circumstances render it doubtful whether much, if any, influence was fairly attributable to the remedy; and in one case only is there room for the supposition that the remedy was highly beneficial. These cases, therefore, fail to furnish proof of any special efficacy in this remedy to arrest or retard the progress of the disease."

In most of the cases reported, the quantity of tuberculous deposit was large or abundant, and the disease had existed for a considerable time, and, consequently, they are not necessarily a truthful exposition of what the remedy may accomplish, if given quite early in the disease. However, in one case, "the remedy was commenced two months after the commencement of the disease, and continued without improvement for six weeks."

Dr. Flint concludes thus :—

"The chlorate of potassa may be given in cases of phthisis, to the extent of half an ounce per diem, with entire impunity, and without occasioning any unpleasant symptoms. It does not produce diarrhœa, and may be well borne when diarrhœa is present in cases of phthisis."

Professor Flint's experiments with this remedy in phthisis were suggested by a paper upon this subject by the late Dr. E. J. Fountain, which was read before the American Medical Association, at its meeting in June, 1860, and first published in the *American Medical Monthly* for September of the same year.

Neither Professor Flint nor Dr. Fountain, in either of the papers referred to, allude to the fact that similar use and recommendation of the remedy had been previously made.

We are of the opinion that the remedial powers of the chlorate of potassa have been greatly overrated. In various forms of sore mouths in children it is indeed a valuable remedy, also in mercurial ptyalism. As a remedy in phthisis, we think our patients are entitled to more reliable remedies. In typhoid fever and diphtheria we have not been positive in regard to its real comparative value, as related to other medicines. It is true we have used it considerably in diphtheria, but never to the neglect of quinine and iron, and were we to dispense with either of the three remedies, it would certainly be the chlorate of potash. In fact, in cases of disease presenting powerful *septic* tendencies, such as some of the malignant forms of erysipelas, scarlet fever, diphtheria, etc., we are beginning to doubt the propriety of alkalies, unless an exception is made of ammonia, where the stimulating power overbalances the alkaline. In such diseases, acids, hard cider, vinegar, etc., are preferable, and we will venture the prediction that these last named will, in a few years, take rank, in the class of diseases indicated, above the chlorate of potassa.

As intimately connected with the paper by Professor Flint, just referred to, we may appropriately consider a *lecture* upon the chlorate of potassa by Professor Samuel R. Percy, of New York, and published in the *American Medical Times* for December 14th. It was the opinion of Dr. Fountain that the chlorate of potash acted beneficially in a certain class of diseases, by parting with six equivalents of oxygen in the system, and thus acting remedially in all diseases accompanied with imperfect aeration of the blood. Upon this point Professor Percy says :—

"Although to some extent this change does undoubtedly take place, it is proved beyond conjecture that it does not all pass as KCl, for even in moderate doses it has been found in the urine in the same form as when taken, and in large doses it has been found abundantly. Wherein, then, is the use of these large doses?"

In regard to its action, Professor Percy starts the following inquiry :—

"The question may, I think, be fairly asked and argued, Is the beneficial result, that is said to be produced in phthisis by this salt, owing to the disengagement of oxygen, or to the known power of alkaline bases or salts to arrest decay when in sufficient quantity, and not too long continued?"

He starts another inquiry which, we think, is fatal to the theory that the disengaged oxygen is the remedial agent :—

"Supposing that this salt did disengage into the blood all its oxygen, in what manner would this oxygen differ, either in its composition or effects, from that absorbed by the lungs, and thus mixed into the current of the circulation? The oxygen eliminated from the same material, and inhaled into the lungs, and carried into the circulation, and *proved* to exist there, fails to produce the results and improvements claimed by Dr. Fountain and others to be produced by the chlorate of potassa. And supposing a drachm, or even half an ounce—the maximum dose given with safety—is administered, how small would be the amount of oxygen evolved in comparison with that taken in by the lungs!"

Professor Percy starts the inquiry in regard to

the priority of recommendation of the remedy under consideration in phthisis, etc. As we have made a few foot-prints in the same path, and as he, by permission, availed himself of a few facts developed by our unpublished researches in this direction, we may be excused for again referring to the matter. To know that a remedy has been greatly extolled, in a certain disease, a few centuries past, and after extended trials abandoned as worthless, may obviate much useless experiment, if the remedy be revived at the present time.

In the two papers by Dr. E. J. Fountain, the former of which was published in the *American Medical Monthly* for September, 1860, and the latter in the same journal for February, 1861, the chlorate of potash was recommended in all forms of scrofulous affections, in phthisis, etc., and cases were reported illustrative of the great benefit resulting from the administration of this remedy. Speaking of those suggestions in his second paper, the doctor observes that he has presumed to suggest the remedy in what he supposes "to be a new and untried field." These papers attracted a good deal of attention from the profession, a majority of whose members, we are led to believe, supposed such use of the chlorate of potash to be a novelty. But an examination of the history of this remedy will show differently.

Dr. Fountain advocated the use of the chlorate of potash in phthisis upon theoretico-chemical grounds, involving what he claimed to be a *new view of the nature of tubercle.* In the *New York Journal of Medicine* for July, 1859, he expressed the opinion that tubercles were the result of the imperfect removal or excretion from the system of certain products of organic decay. A few months later, Godwin Tims, of London, issued a work upon the *Nature and Treatment of Consumption*, in which the same pathological views were advocated. Learning this, in the Reporter for May 12th, 1860, Dr. Fountain distinctly and without reservation claimed for himself the honor of first announcing to the profession this new theory of phthisis. The fact is, these views were not original with either of them. They had been the property of the profession for nearly a score of years. So far as we know they were first advocated by Zimmerman as early as 1844. Copland, Williams, Simons, etc., among Transatlantic physicians, and Professors Draper, Lawson, and the present writer, in this country, had previously referred to this pathological view. This fact is admitted by Professor Percy, and in support he quotes two passages from an article by us, written in 1855, and published in the *American Medical Monthly* for January, 1856. We quote Professor Percy's reference to this matter. He says:—

"Dr. O. C. Gibbs (in the paper referred to) says, 'Many eminent names in the profession have recently taken a different view, and now consider it (tubercle) an *excrementitious product*, derived from the *waste of the tissues*, or the *oxidation of the blood.*' Dr. Gibbs, in the same paper, again remarks, 'that if the material from which tubercle is formed *reverts to the blood from the waste of the tissue, then its superabundance is an evidence of increased oxidation, and waste of certain elements of the body, or of deficient elimination of this excrementitious product.*' You will observe that Dr. Fountain's views correspond with those previously stated by Dr. Gibbs; but Dr. Gibbs *does not claim them as original with himself;* he is but ably stating the opinions of the day, as held by the minority in contrast to those of the majority."

As we had reason to know that our paper, written in 1855, and from which Professor Percy quotes, was sent to the office of Dr. Fountain, we were not a little surprised when he made the claim in the Reporter, to which we had previously referred, but were still more surprised when, in a note to his paper, published in the *American Medical Monthly* for September, 1860, he entirely misrepresented us, and then charged us with ignorance and inaccuracy.

We at once wrote to Dr. Fountain, informing him that we had never confounded *his views* with *ours*, as anywhere published, but we did identify those he claimed as original with those years ago advanced by others, and stated by us five years before he laid claim to them. We further informed him that his use of the chlorate was not a novelty, in any particular, and cited him to authority, page, etc. When, five months later, he published another article upon the chlorate of potash, and its use in scrofulous diseases, and made no correction, nor abated in the least from his former claims, we confess we lost confidence in the author. This neglect induced us to investigate the matter anew. The result was an article of some length, showing the correctness of our position. This was in the hands of the printer when Dr. Fountain's unfortunate death was made known to us. We at once suppressed the article.

We would be the last to strive to take from the living or the dead a well-earned laurel, and have made the above remarks with great reluctance, but the substance of the papers before us

seemed to suggest them, and justice to ourselves and the profession to call for them. We scruple less in this case, because we would restore the laurels to him or those that earned them.

Dr. Fountain first used the chlorate of potash in phthisis in November, 1859. The treatment was a novelty to perhaps a majority in the profession, and he so earnestly advocated it that many have been induced to give it a trial. So far as published, the results have not been encouraging.

Bearing upon its previous use in phthisis, Professor Percy remarks:—

"As to its effects in phthisis, and for which Dr. Fountain claims originality, and considers it almost a specific, we find, in the *London Lancet* for 1836, that Köhler tried it in 1833 very extensively (in twenty-five cases) in the same disease, and much in the same manner, without experiencing benefit from it. Dr. Garnet tried it to restore the deficiency of oxygen in the system in scorbutic affections, (see Duncan's Annals of Medicine, 1779.) Copland, in his Medical Dictionary, published in 1840, recommended it in bronchitis, and adds that 'Mr. Murray, in a recent publication, states that he has employed it successfully in *consumption*.'"

Dr. T. D. Mitchell, of Philadelphia, in his work on Materia Medica, says of the chlorate of potash:—

"This salt was, at *one time, much employed* in the treatment of *pulmonary consumption*. Dr. Kohlen, of the Berlin Hospital, gave it with a pretty liberal hand, and was one of its most sanguine admirers. His favorite prescription was as follows:—

℞.—Chlor. pot. ℥j;
Aq. destill. f ℥jv;
Syrup althæa, f ℥j. M.

Dissolve the first two, and add the syrup named, or any simple syrup. The dose is a tablespoonful four times a day.

"Some physicians in *this country* made *repeated trials* of the chlorate in various forms of the same disease, but *not with sufficient success* to warrant us in reposing much confidence in it as a means of doing service to consumptive patients. It is decidedly stimulant, and may have done harm in many cases. I think it has been the occasion of hemoptysis frequently." (*Mitchell's Therapeutics*, p. 694, edition of 1857.)

Bearing upon Dr. Fountain's last paper, in which he recommended the chlorate of potash in unhealthy sores, abscesses, and the various forms of scrofulous disease, we quote again from Professor Mitchell's work, (page 696.)

"The same salt has been employed with good results in the treatment of *unhealthy ulcerations* in adults also. The principle of action is the same in all cases, most probably. (See the *London Lancet* and *Medico-Chirurgical Review* for 1843.")

Dr. Fountain also claimed to have *discovered* the utility of the remedy in *mercurial ptyalism* in 1851. Upon this point Professor Percy remarks:—

"Professor G. B. Wood, in the first edition of his Practice of Medicine, which was, I believe, issued in 1847, four years before Dr. Fountain dates his discovery, in speaking of the treatment of mercurial stomatitis, says: 'The internal use of chlorate of potash has been recommended as highly useful, though requiring caution;' and he refers, as authority, to the January number of the *American Journal of Medical Sciences* for 1844. MM. Herpin and Blache employed it, and recommended it for the same purpose in 1855; Ricord, in 1856; Gallier, in 1857; whereas Dr. Fountain has given no record of his use of it thus prior to 1860."

Touching this point, Professor Daniel Brainard remarks:—

"We have known it (the chlorate of potash) as a common remedy for *mercurial salivation*, stomatitis materna, scarlatina anginosa, etc. etc., for *more than twenty years*, and as far back as we can recollect in medicine it was by no means considered a new remedy."

Dr. Fountain advocated the administration of the chlorate of potash in what would ordinarily be considered large doses, and maintained that such doses were harmless. In proof of this view, he took one ounce of the chlorate of potash at a dose, and unfortunately fell a sacrifice to his imprudence. This was not a new experiment, but new in its sad results. The late Professor Tully nearly thirty years ago experimented with this remedy. In the *Boston Medical and Surgical Journal* for 1833, we believe, he detailed those experiments. To several persons *ounce* doses of this article were administered, with unpleasant and painful symptoms but without fatal consequences.

From the foregoing it will be seen that Dr. Fountain was not original, either in his pathological views, his therapeutic uses and recommendations of the remedy, or in that last sad and fatal experiment. This fact, of course, constituted no bar against his expressing his views and reporting his experience. Justice, however, demanded that he "render to Cæsar the things that are Cæsar's." Instead, he persisted in maintaining that he was entitled to the honors of originality in each of these particulars.

It is proper to observe here that neither Pereira, Professor Tully, nor Dr. C. A. Lee believe that the chlorate of potash acts chemically by supplying oxygen to the system. Dr. Lee thinks it acts as an alterative tonic. Professor Percy says :—

"It is my opinion that it acts rather by its unity as a saline, possessing its own peculiar action, than by decomposition."

Professor Percy makes some additional remarks in regard to its therapeutic uses. We can make only very brief references :—

"There are symptoms in typhoid fever that are much relieved by its careful exhibition. When, in this disease, the urine is found to be scanty and high colored, with the brain dull, owing to this scanty secretion, this remedy, given in moderate doses, freely diluted with water for twenty-four or forty-eight hours, will generally be found to give great relief by its restorative and diuretic action."

"On the whole, it is, perhaps, the best remedy we have for buccal inflammations and for ozæna."

Professor Percy further says that Professor Jacobi has found the remedy not only almost uniformly successful in *curing* mercurial stomatitis, but equally so in *preventing* it. From the first day of mercurial treatment, as, for instance, for syphilis, he gives the chlorate of potash in drachm doses, without any abatement of the effects of the mercurial, and without salivation, though the mercurial be continued for weeks.

THE MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, SATURDAY, MARCH 29, 1862.

MEDICAL PROVISION FOR RAILROADS.

We have read with great pleasure the paper on this subject, placed by Dr. Edmund Arnold, of Yonkers, N. Y., before the late meeting of the New York State Medical Society. The paper is reprinted in pamphlet form, and undoubtedly has been widely circulated. It presents some facts and suggestions which are eminently worthy of attentive consideration. During a period of five years, from 1856 to 1860, 683 persons were killed, and 624 injured on the thirty railroads of New York. On five of these roads, with a total length of 1338 miles, 528 were killed and 412 injured. The railroads of New York are as well and as carefully constructed and managed as any in the United States; but here is an annual loss of life upon them of over one hundred each year, and also a like number of persons injured. This, however, is only the naked fact. The fearful amount of human suffering caused by these figures is not, nor can it be, computed by any such methods of notation. But few, comparatively, are killed outright. Many linger for hours and days perhaps, before death comes to their relief; while the mass undergo the most intense suffering for weeks and months, and perhaps are crippled or maimed for life. Nor is this all. No one can tell when or in what locality a "terrible accident" will occur. The open "draw-bridge," through which a long train of cars may be piled, with its living freight, one upon another in inextricable confusion, is hardly seen until the mischief is all done. The approaching train coming with full speed is concealed by the curving road till it is too late to prevent the crushing collision. And so, without warning, and in the midst of a calamity which humanity shudders to behold, and before which it stands petrified with horror, scores of human beings are thrown at once upon the care and attention of those who happen to be near when the accident occurs. "Not a rag is on hand to staunch a bleeding wound; not a single appliance within reach of any medical man who might happen to be near the cars, to enable him to render effective service." Amid the wildest excitement of the by-standers, and the absence of necessary aid in such emergencies, the feeble spark of life goes out in some whose lives might otherwise have been saved, and the sufferings of those who survive are greatly prolonged and aggravated.

To propose a remedy for this condition of things is the object of the writer in the pamphlet before us. The plan is this: That each company appoint at its main terminus a medical inspector, who shall have a small salary and rank as assistant superintendent. His functions would be multifarious. He would be the confidential medical adviser of the Directors of the road in all *pecuniary* and other *transactions* with the district surgeons. A part of his duties would be to organize the line into districts, to issue a code of directions to station masters and flagmen as to what should be done upon the sudden emergency of an accident. The company should also appoint district surgeons (to be paid for actual services rendered) at all the principal towns on the route, not more than ten or fifteen miles apart. So far the surgeons. Then further, at each surgical station a small room should be set apart, and furnished with bedstead and bedding, a stretcher

with mattress and pillow, table, chairs, and warming apparatus, lint, bandages, sponges, splints, etc., and as a still further provision for an accident that may occur between these stations, the same appliances should be kept upon each train. Such are the essential features of the plan proposed by Dr. Arnold, and as a humanitarian measure it deserves serious consideration. If carried into operation upon all our railroads, the horrors of the "accidents" frequently occurring would not only be greatly mitigated, but many valuable lives would no doubt be saved, and our railroad companies would thus recognize a legal as well as a moral obligation to guard against their occurrence. A double object would thereby be gained. Both the traveler and the company would be better protected. That some medical provision for railroads is needed, is sufficiently evident, and that the companies themselves should bear its entire expense is, in our opinion, eminently proper. For though built ostensibly for the benefit of the public, the stockholders are yet the recipients of all the pecuniary profits.

But we would suggest whether the plan proposed by Dr. Arnold is not more complicated than necessary, and whether the end sought could not be gained with less machinery? Whether the connection of any surgeon with any railroad as a medical adviser of the Directors in all pecuniary or other transactions, is not liable to serious objection, and will not compromise his impartiality and independence, and subject him to the charge of sinister motives in some of his decisions or advice? Whether the impromptu gathering of surgeons from the vicinity where an accident occurs, their compensation to be regulated in the same manner as that for other services rendered, and to be paid by the company, would not be much more simple, prompt, and effective, and comport better with the dignity of the profession? Whether, if the surgical appliances are kept, as they should be, at stations and in the trains, as a part of the paraphernalia of the road, the end sought, viz., the speedy care of the wounded and mutilated, and the speedy supply of all their necessities, could not be better accomplished without the routine of "head surgeon" and "district surgeon," general duties and subordinate duties? But these are only hints intended to direct the attention of the profession more particularly to the subject, and we will only add, whatever may be the views entertained in regard to the feasibility or practicability of the plan proposed by Dr. Arnold, his pamphlet is worthy of a careful perusal, and he is entitled to the gratitude of the entire community for discussing so important a subject with so much enthusiasm, humanity, and discretion.

AMERICAN MEDICAL ASSOCIATION.

Further reflection and observation more fully confirm us in our conviction, that the interest and unity of the medical profession of our whole country would be essentially promoted by the postponement of the meeting of the American Medical Association another year. The circumstances which so clearly indicated the policy pursued last year, and in which the profession so generally acquiesced, have, if possible, additional force at the present moment. With all the crushing weight of a terrible war upon our beloved country, and with the attention of our ablest surgeons, many of them prominent members of that body, intensely occupied in their humane efforts to mitigate its horrors, the time is not auspicious for an annual commingling of the medical brotherhood. A postponement till the storm is overpast is decidedly preferable. Such is our view. Such, so far as we are informed, are the views of the profession of this city, (who have always taken a deep and abiding interest in everything pertaining to its welfare,) and of the country, with few exceptions; and such, we are authorized to say, is the recommendation of the delegates to the Association from this city. Such, too, we make no question, will be the view of all who sincerely desire the prosperity and unity of the only national association now left intact in our country. These views, we are pleased to observe, are emphatically indorsed by our cotemporary the *Medical News*.

Meanwhile, State and local societies should hold their sessions as usual, and more of life, energy, and activity be infused into their proceedings. Those which have been already held have been unusually interesting and profitable, and well attended, and afford a fair prestige of like success for those yet to be held. And this reminds us to inquire after the Medical Society of Pennsylvania, and to urge the proper authorities to see to it that early notice is given of the approaching meeting, so that the profession in the whole State may have ample time to be fully represented. While we wait the result of events for a happy reunion of the medical fraternity

North and South, upon the floor of the National Association, the opportunity will be most auspicious for a free, full, and courteous interchange of opinion and sentiment in the State and local organizations.

EDITORIAL NOTES AND COMMENTS.

Vindication of Surgeon J. B. Porter.—The readers of the Reporter will remember that a few weeks since we referred to some statements that were made by Senators Hale and Wilson, relative to alleged mismanagement of the Alexandria Hospital. A court of inquiry was convened at the request of Surgeon Porter, which, after a long, careful, and laborious investigation of the matter, taking the evidence on oath of the complainants themselves, came to the conclusion that—

"The evidence has failed to substantiate the statements set forth in these letters, except for a short period in the month of December, 1861, the flour furnished to the Alexandria bakery was of an inferior quality.

"No witness has testified to Dr. Porter's striking patients, or otherwise punishing them.

"The only instance of men being punished outside of the hospital, was of a man who was drunk, who was turned over to the Provost Marshal of Alexandria for temporary restraint.

"Within the hospital, patients under treatment have had the usual mode resorted to of keeping them confined to their room—that of removing their clothes when they have violated the rules of the hospital and of the attending surgeon. That the eating out of the swill-barrel by several men was a mere voluntary act on their part, in consequence of their having absented themselves at the usual dinner hour.

"The Court has drawn up the facts without taking the evidence of any one of the witnesses whom Dr. Porter offered to produce.

"The Court finds that the conduct of Dr. John B. Porter toward the patients has been distinguished by kindness and consideration for the wants of the sick; that no complaint has ever been made of Dr. Porter, except in one instance, by the principal complainant, to Col. Mansfield, and that, according to his own evidence, it was immediately corrected.

"The Court, from its own observation, cannot speak too highly of the condition of the Mansion Hospital, which is exhibited in the fact that out of 500 patients there have been but 32 deaths."

The object the complainants had in view was to obtain their discharges, and the signing of the certificates by most of the patients was because they were led to believe that if they could swear to one grievance (that relative to bread) they could sign the certificates to all of them.

Thus a meritorious officer is triumphantly vindicated from charges of the most injurious character which have been with perverse industry circulated against him; and through him the medical department of the army is also vindicated from the gross dereliction of duty alleged against it by those who sought to supplant it. We hope to see the result of this inquiry made as public as the slanders.

The Tax on Patent Medicines.—Among the articles enumerated in the new tax bill as sources from whence it is proposed to raise a revenue for the support of the government in this trying crisis, we observe patent medicines are included. These articles are so numerous, and so persistently used by a large class of the community, that it is wisely argued a large sum may be realized from a tax upon them. And no doubt such will be the result. Worthless as nearly, if not all, these articles are, still the people are so excessively fond of humbuggery that they will buy them, and quackery may thus be made to contribute to the public good. And besides, the sales are nearly all profits, so that the class of persons who are constantly humbugging the dear people with their nostrums, will be compelled to disgorge some of their ill-gotten gains. But complaints are going up, we understand, that this tithe of a tax will ruin the business. To say nothing of the ridiculousness of the assumption, or of the fair imputation of want of patriotism, which objection to this tax implies against these so-called "benefactors of humanity," we certainly know of no business the entire absence of which would be so little felt in reality by the community, or which would so directly benefit the sanitary condition of our common humanity. We go in for the tax, therefore, and if the fears of ruin in consequence are realized by those engaged in the business, the voice of intelligence and of humanity ought to say, Amen, so mote it be. But there is no danger. The quack medicines will survive to pay the tax.

Wounds at the Battle at Fort Donelson.—Dr. E. Andrews, of Chicago, who acted as a volunteer surgeon for the relief of the wounded at Fort Donelson, says that the number of wounds in the head was remarkable. In his observations among the dead, lying on the field and in the hospitals,

he noticed, what at first appears strange, that some bullets traversed from above downward, parallel to the axis of the body. This is explained by the fact that in the most hotly contested places the men availed themselves of the shelter afforded by the rotundity of the hills, by lying flat upon the ground. In this position they loaded and fired a large part of the time, when not advancing or retreating. When raising the head to fire that was the only part of the body exposed, and hence the only portion which at certain periods of the contest received injury. As the men lay with the head toward the enemy, the peculiar wound from above occurred.

Accurate statistics of the wounds have not yet been obtained; but Dr. Andrews presents the following record of some of the wounds, from which it will be noticed how great is the preponderance of wounds of the head, being sixty-one cases, including injuries of the face, which is seventeen per cent. of the whole list. If, now, we consider that these were all in hospital, while a large portion of those wounded in the head died at once on the field, and are not reckoned, it will be seen that this roll of injuries was very numerous :—

Wounds of cranium, 14; scalp, 19; eye, 4; jaw, 4; chin, 2; tongue, 1; ear, 3; mouth, 4; other parts of face, 10; neck, 8; fractures of shoulder, 13; arm, 16; wounds of shoulder, 30; arm, 27; elbow, 4; fractures of forearm, 4; wounds of forearm, 4; fractures of hand, 25; wounds of hand, 11; chest, penetrating cavity, 10; not penetrating, 10; back, 5; abdomen, 7; fractures of hip, 7; wounds of hip, 8; fractures of thigh, 9; wounds of thigh, 37; fractures of knee, 2; wounds of knee, 7; fractures of leg, 9; wounds of leg, 27; fractures of foot, 4; wounds of foot, 2; powder burns, 3.

The same occurrence of wounds, in a vertical direction through the cranium, has been repeatedly noticed in battles of recent times. In one instance recorded in the Crimea, the ball entered at the vertex of the cranium, traversed the neck, back, buttock and thigh, and escaped near the knee.

Bellevue Hospital Medical College, New York.—The first annual commencement of this college took place on Monday evening, March 17th, in the presence of a large and select audience. The following gentlemen successively received their diplomas upon the administration of the Hippocratic oath :—

Agustin Alvarez, Cuba; George M. Bower, Illinois; Josiah O. Cramton, M.D., Vermont; J. Wilbur Curtis, Massachusetts; Walter Caswell, Ohio; Jared W. Daniels, Minnesota; Clarence Ewen, New York; James F. Ferguson, M.D., U. S. A.; Francis Stanley Grimes, M.D., New York; Van Buren Hubbard, New York; Lucius B. Irish, M.D., New York; William H. King, New Jersey; Emelio L. Luaces, Cuba; Jacob B. Luce, New York; Lewis J. Lyman, Illinois; John B. McCaffrey, New York; Emelio L. Mola, Cuba; Jean Oscar Parmel de Marmon, New York; Edgar Olcott, Jr., New Jersey; Henry Raphael, New York; Elijah Rowell, M.D., Canada; Thomas J. Swisher, Pennsylvania; Orsamus Smith, New York; John Struthers, Nova Scotia; Lewis T. Trumbower, Pennsylvania; David Warman, New Jersey; James H. Williamson, A.M., M.D., Ohio; John C. Williamson, M.D., Ohio.

The occasion was made one of great interest and profit by addresses from Dr. Taylor, the President of the institution; Dr. Geo. T. Elliot, one of the professors; Mr. S. Draper, of the Board of Trustees; Mr. Hubbard, of the graduating class; and Rev. Dr. Chapin, of the clerical order.

The number of students in attendance during the session has been over one hundred, which, for an institution opened at "a time when the national calamity was the greatest," is in the highest degree flattering to its board of instruction, and encouraging to all its friends.

The first regular course of clinical lectures in New York was commenced in Bellevue Hospital in 1847, and was listened to, it is said, by the house staff and one student. Now, the benefits of clinical instruction are universally acknowledged, and deemed indispensable to the complete education of the practitioner.

The graduating class of the Massachusetts Medical College testified their esteem for the janitor of the college, Mr. W. B. Andrews, by sending him an elegant cake-basket.

Correspondence.

DOMESTIC CORRESPONDENCE.

Kankakee City, Illinois, March, 1862.

Messrs. Editors :—The following facts having come under my observation, I pen them under the conviction that they may prove of interest to the profession. Some time in January, 1857, a man in this place, by the name of John Franklin, was bitten by his own dog, as was also his little child aged three years. A few days subsequently the child became ill, and when fluids were offered would sometimes try (though ineffectually) to swallow; at other times appear almost overcome with fear at the sight of them, and would suddenly cover her head with the bedclothes, or go into spasms. I saw the case once with the attending physician, and learned from him subse-

quently that she died in convulsions. A post mortem was requested by the parents, who, I learned, were not satisfied in regard to the alleged cause of her death. The lungs were engorged, and inflammation of the larynx, trachea, and bronchial tubes existed to a slight extent. The brain and viscera of the abdomen were apparently in a normal condition. We were confirmed in the opinion that our diagnosis was correct; but failed to convince the parents that the child died of hydrophobia. Last fall the father of the child enlisted, I think in Company G, 20th Regiment I. S. V. While stationed at Cairo he was suddenly taken ill, and exhibited all the symptoms of the disease which proved fatal to his child. The attending surgeon at once pronounced it a case of hydrophobia, and then learned from him the facts just narrated.

From the facts in this case, we learn that nearly three years and nine months elapsed from the time he was bitten ere the disease was developed.

J. M. Mack.

ARMY CORRESPONDENCE.

An Improvement on Pirogoff's Operation Suggested.

U. S. General Hospital, Fort Monroe, Va.,
March 19th, 1862.

Gentlemen:—I desire, through the columns of your *weekly*, to propose to the profession an improvement in the method of performing Pirogoff's operation, as follows: Make an incision from the posterior margin of one malleolus to the other, by cutting from within outward, closely hugging the os calcis, and transfixing the plantar mass; then raise a flap from the dorsum of the foot of sufficient size, and reflect it as far as the articular extremity of the tibia, which proceed to saw off *at once*, with the fibular projection; then pass the knife closely behind the ankle-joint, and clear the os calcis of soft parts, far enough back to saw obliquely forward and downward, and the bony flap will fit without force. After many operations on the cadaver, I have found this the most convenient method of performing the operation, avoiding, as it does, the necessity for disarticulation, and the very troublesome step of removing the extremity of the tibia after the foot has been detached.

Respectfully yours,

Reed B. Bontecou, *Brigade Surgeon.*

P.S.—Our sick report shows a less number than at any time since October last.

NEWS AND MISCELLANY.

Spring and Summer Courses of Instruction.—Circulars have been received of spring and summer courses in this city on the following specialties:—

Medical Chemistry.—Dr. J. J. Reese gives a course of lectures and practical manipulations in medical chemistry, continuing during the spring and summer months. Students have the opportunity of manipulating for themselves, and of practicing the various tests. Dr. Reese has been for a long time a prominent teacher in this department.

Practical Obstetrics. — Dr. E. Wilson's course, in connection with the Philadelphia Lying-in Charity, continues about three months. It includes lectures and demonstrations on the principles of obstetric science, and the practical details of the art of midwifery, and practical opportunities in attending obstetric cases are given to pupils when properly qualified.

About *five hundred* obstetric cases are thus assigned to the class, under the supervision of the principal and his assistants. This course has been long established, and is extensively patronized.

Army Hospitals in Philadelphia.—There are already six hospitals in this city, containing about 1400 patients. The number, however, is constantly changing, from constant arrival and departure. The location of these hospitals, and Surgeons in charge, are as follows:—

Hospital, Broad Street.—Beds for patients, 626; Surgeon in charge, Dr. John Neil; Assistant-Surgeons, Drs. H. C. Yarrow, H. M. Bellows, H. Allen, George McGill, W. R. D. Blackwood.

Hospital, Christian Street.—Beds, 78; Surgeon in charge, Dr. John J. Reese; Assistant-Surgeon, Dr. D. Burpee.

Hospital, Wood and Twenty-second Streets.—Beds, —; Surgeon in charge, Dr. C. W. Horner; Assistant-Surgeons, Drs. Lineaweaver, Gordon, S. H. Hornor.

Hospital, South and Twenty-fifth Streets.—Beds, 200; Surgeon in charge, Dr. Jos. Hopkinson; Assistant-Surgeons, Drs. Gibbs, Tryon, W. B. Atkinson.

Hospital, Fifth and Buttonwood Streets.—Beds, 275; Surgeon in charge, Dr. Bournonville; Assistant-Surgeons, Drs. R. J. Dunglison, W. M. Breed.

Hospital, Summit House.—Beds, —; Surgeon in charge, Dr. Winthrop Sargent; Assistant-Surgeon, Dr. J. M. Fox.

Some 400 have arrived in a single day, and they are all properly cared for. The kindness of our citizens toward the sufferers is unremitting, and delicacies of many kinds are incessantly showered upon them in profusion—so much so, that the Surgeons find it necessary to adopt some stringent rules to prevent injury to the sick from the free use of the delicacies.

Philadelphia Almshouse.—Drs. J. H. Jarmar, C. S. Benton, F. F. Maury, H. C. Wood, C. H. Boardman, R. M. Girvin, J. W. Burnet, and J. E. Owens were elected Resident Physicians to the Almshouse, on Monday last. The Hospital Committee were directed in no case to grant leave of absence to a resident physician for more than two weeks at a time, unless from sickness or other uncontrollable circumstances.

Massachusetts Medical College.—On Wednesday, March 12th, thirty-eight gentlemen received the degree of Doctor of Medicine at the Massachusetts Medical College. The Commencement exercises were opened by a prayer by the Rev. Dr. Peabody, and after the reading of the selected dissertations by several of the candidates, the degrees were conferred by Professor Holmes. Of the dissertations, all of which were of uncommon merit, three deserved especial notice—that on *Veratrum Viride*, by Samuel W. Abbott, of Woburn; on *Pneumonia*, by Charles Henry Munro, of Pictou, N. S.; and on *Disorders of the Dental Structures causing Distant Neuralgia, without Local Pain*, by William Nichols, Jr., of Brookline. The address to the graduates, by Professor Bacon, was of unusual interest, and was listened to by a large audience, including the Governor, the Hon. Edward Everett, and other distinguished persons.

The following are the names of the graduates:

Samuel W. Abbott, Woburn; Melbourne E. Balcom, Paradise, N. S.; Joseph B. Baxter, Gorham, Me.; William L. Bond, Charlestown; Llewellyn Brown, Norridgewock, Me.; Frank E. Bundy, Boston; John H. Clark, Amherst, N. H.; Augustus P. Clarke, Bristol, R. I.; Joseph F. Coolidge, Westminster; Homer C. Truro, N. S.; Samuel A. Davis, Bridgeton, Me.; Thomas M. Drummond, Kingston, Jamaica; Daniel Farrar, Troy, N. H.; William L. Faxon, Quincy; William K. Fletcher, Claremont, N. H.; William B. Gibson, Boston; Samuel L. Gould, Jr., Albany, Me.; Nathaniel Greene, Jr., Boston; Horace P. Hemenway, Somerville; John Homans, Boston; Smith A. Jenkins, Chatham, N. Y.; Daniel F. Leavitt, South Danvers; John K. Lewis, Constantia, Ohio; William H. Macdonald, Antigonish, N. S.; Charles H. Munro, Pictou, N. S.; William Nichols, Jr., Brookline; Jansen T. Paine, Charlestown; Joseph B. Reynolds, Concord; Michael Roberts, Lawrence; Benjamin W. Robinson, Marblehead; James D. Ross, Truro, N. S.; Edward M. Skinner, St. John, N. B.; George L. Smalley, Quincy; Charles Sturtevant, Newton; Charles H. White, Watertown; Joshua G. Wilbur, Boston; Albert Wood, Northborough; Warren A. Wright, Norridgewock, Me.

We are glad to hear that the number of students during the last year has been larger than at any previous time—a fact, when we consider the present condition of affairs, which shows the deservedly high reputation of the school throughout this portion of the country.—*Boston Med. Jour.*

Extraordinary Longevity.—The obituary of the *Times* has lately contained some marvelous instances of old age; for example, on the 20th ult. are recorded the deaths of five ladies and two gentlemen, whose united ages amounted to 629 years, giving an average of 89 years and 6 months for each; the youngest, a woman, being 82, and the oldest, also of the same sex, having reached the extraordinary age of 103 years. Again, in the above paper of the 25th ult., appears the death of another lady aged 103 years, having three sons aged 75, 77, and 79, twenty-four grandchildren, fifty-one great-grandchildren, and two great-great-grandchildren.

Death of a Surgeon.—Dr. W. N. Lane, a native of Pepperell, Massachusetts, and Surgeon in the United States Navy, arrived in New York on Thursday last, from Key West, in the *Rhode Island*, and died of consumption the following Saturday, at four and a quarter P.M., in his apartments at the La Farge House. When the rebellion broke out, Dr. Lane left a large and lucrative practice in Boston, and enlisted in his country's service—from the duties of which death has so soon relieved him. His age was forty-two years.

Clinical Instruction in San Francisco.—The students of the Medical department of the University of the Pacific will, in future, enjoy the benefits of clinical instruction to the fullest extent. The City and County Hospital, constantly filled with interesting cases, composing nearly every form of disease to which our coast is subject, is now open to them. The St. Mary's Hospital, under the supervision of the ever-zealous and self-sacrificing Sisters of Charity, which bids fair to be one of the noblest and most prosperous institutions for the sick, will, as we are assured by one of the attending physicians, admit the class, during the last half of the present session, and, after that time, continuously during future sessions. These, associated with the surgical clinics of the Pacific Clinical Infirmary, constitute an amount of bedside instruction seldom afforded to medical students.

Report of the Surgeon-General.—We have received the annual reports of the Adjutant-General of Massachusetts, together with those of the Surgeon-General, Commissary-General, Master of Ordnance, and Military Committee of the Council, for 1861. The report of the Surgeon-General comprises sixteen pages, and for brevity and clearness is most commendable. It appears that the whole cost of medicines and hospital stores since the commencement of the war in all the regiments, while in camp in this State, to November 7th, was $1862 07; the cost of the same for the three months' outfit, $8719 25; the outfit for surgical instruments, dressings, furniture, etc., $12,102 40; making, after deducting the amount returned by the three months' volunteers, a total of $22,441 60. The amount paid for the examination of recruits and medical attendance was $1732 05.

It is a source of pride and satisfaction that the appointments to the medical corps have been generally such as to reflect credit and honor on our State; and we are not surprised at the relatively small amount of sickness among Massachusetts troops. This exemption from diseases incident to armies, Dr. Dale attributes to the generally healthy character of the season, "the prudent oversight in the selection of camps, the faithfulness and efficiency of the commissariat, and the general intelligence which characterizes the material of our volunteer force; but mainly to the untiring watchfulness and fidelity of the regimental surgeons, and their care and vigilance in all matters pertaining to the hygienic and sanitary condition of the camps." There has been no prevalent form of epidemic disease in the

camps situated in our own State; and the number of acute disease has also been unprecedentedly small, and all of a mild type. On the whole, the condition of our soldiers, as shown by this report, is of itself a sufficient proof of the energy, judgment, and efficiency of our Surgeon-General and of the medical officers under him, no less than twelve of whom have been appointed to brigades since the commencement of the war, and nearly all of whom command the respect of both officers and men.—*Boston Med. and Surg. Journal.*

Health of the Troops in Canada.—The reports which reach us of the careful medical supervision of the troops for Canada, and the consequent good health of the men dispatched thither, are of a kind which must be in the highest degree satisfactory to the nation, and honorable to the head of the Army Medical Department and the medical officers of the Canadian Depot who have acted under his orders. The precautions taken were indeed extraordinary. Each man had served out to him the following amount of extra clothing: two pairs of woolen drawers, two pairs of worsted stockings, two merino under-vests, one chamois-leather waistcoat, one Jersey, one pair of sealskin mits, one sealskin cap with ear-muffler, one sheepskin overcoat, and one pair of Canadian boots; also for the sleigh, in addition, one pair of fur and buffalo robes. The transit in ships was arranged with perfection, and when the men arrived they found the most elaborate and thoughtful provision for their comfort and protection from the cold. Dr. McIllree, the Deputy-Inspector-General of Hospitals in Canada, with the assistance of Surgeon Major Wood, appears to have carried out the instructions received from Dr. Gibson, the Director-General of the Army Medical Department, with zeal and intelligence. Stations were provided every thirty miles along the route, and small hospitals for the sick were fitted up. Further arrangements were made, where advisable, at farmhouses on the road, for the reception of stragglers, and small depots for medicines and medical comforts. Huts were erected for sleeping, properly warmed, ventilated, and planked; and thus the men were well lodged, and preserved from the demoralization consequent upon being mixed up with the civil population. Dr. Muir, with Dr. Rutherford, (the sanitary officer,) went over the route before the troops, and put the finishing touch to the arrangements. The men had warm coffee and a meat breakfast, hot rum and water with their lunch, and hot coffee with their supper. Their rations were increased to the degree which the greater demands of cold required. Thus it was ordered by the home authorities that the daily ration of fresh meat should be increased up to a pound and a quarter, or, if necessary, a pound and a half. Valuable general sanitary directions were circulated, and the medical officers were warned to be on their guard against pneumonia. The general results as to health have been, up to the present time, excellent. We believe that the ratio of sickness to strength has scarcely amounted to two per cent. This is a result which shows that the Medical Department has merited well of the country, and has performed a difficult duty with entire success.—*Lancet.*

Dangerous Fashionable Follies.—An analysis of green artificial flowers has been made by Professor Hofmann, for the Ladies' Sanitary Association. He says:—

"In a dozen of the leaves sent me analysis has pointed out on an average the presence of ten grains of white arsenic. I learn from some lady friends that a ball-wreath usually contains about fifty of these leaves. Thus a lady wears in her hair more than forty grains of white arsenic, a quantity which, if taken in appropriate doses, would be sufficient to poison twenty persons. This is no exaggeration, for the leaves sent to me were — some of them at least — only partly colored, others only variegated. In consequence of some inquiries, I have been led lately to pay more than usual attention to the head-dresses of ladies, and I observe that the green leaves are often much larger and more deeply colored than those which I have received.

"Ladies cannot, I think, have the remotest idea of the presence of arsenic in their ornaments. If aware of their true nature, they would be satisfied with less brilliant colors, and reject, I have no doubt, these showy green articles, which have not even the merit of being, as far as coloring is concerned, a truthful imitation of nature. There being no longer a demand for them, the manufacture of poisonous wreaths and poisonous dresses would rapidly cease as a matter of course."—*Dublin Medical Press.*

A table has just been published in a Paris journal, classifying the population of the French empire by sex and position, according to the census taken in 1861. The total population of the eighty-nine departments amounts to 37,382,325, of whom 18,642,604 are males, and 18,739,721 females. There are 10,210,856 bachelors, 7,503,024 married men, 928,724 widowers, 9,487,541 spinsters, 7,457,115 married women, and 1,795,065 widows.—*Dublin Medical Press.*

MARRIED.

Hall—Lane.—In New York, on the 19th inst., by the Rev. S. H. Platt, George W. Hall, M.D., and Emma M., eldest daughter of James Lane, Esq.

DIED.

Gardner.—In West Chester, March 23d, Frank P. Gardner, United States Navy, son of Dr. Joseph Gardner, aged 25 years.

Levis.—On the 23d inst., in this city, Mary Henry Levis, daughter of Dr. R. J. and Henrietta R. Levis, aged two years and five months.

Manley.—In Long Island City, N. Y., on the 10th inst., Garret V. Manley, M.D., in the 39th year of his age. He died very suddenly from disease of the heart.

McClellan.—On Sunday, March 23d, Emily, youngest daughter of the late Samuel McClellan, M.D., of Philadelphia, aged 13 years, 4 months, and 10 days.

Stout.—In Princeton, New Jersey, on the 26th of February, after a short but severe illness, Wessel Ten Broeck Stout, M.D., son of the late Richard M. Stout, of Allentown, N. J.

3477
X273

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01224 6302